

# Guidelines for Writing Effective Multiple-choice Items

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## 1. GENERAL PRESENTATION

- Write the stem and options as clearly and unambiguously as possible.
- Keep reading time to a minimum.
- Use language that is appropriate for the students being tested.
- Arrange options vertically, not horizontally.

## 2. THE STEM

- Write the stem in question format whenever possible and in sentence-completion format only when necessary.
- Make the stem as clear and informative as possible, and have it pose a straightforward, focused question or problem.
- If you choose to use sentence-completion format, always place the blank at the very end of the stem.
- Avoid putting extraneous information in the stem unless it plays a role in the assessment procedure.
- Whenever possible, avoid negative wording in the stem, and be sure to emphasize it when it does occur.

## 3. THE OPTIONS

- Capitalize and punctuate the options in a manner that is appropriate to the format of the stem.
- Be certain that only one option is correct.
- Use no more than four options.
- Balance the answer key so that the correct response appears in each position about the same number of times.
- Make the distractors as plausible as possible.
  - a. Use distractors that are in the same domain as the keyed response.
  - b. Use errors that students make in other contexts.
  - c. Use words that sound important or have associations to the stem.
  - d. Use distractors that are true, but do not correctly answer the question.
- Whenever possible, arrange options in a manner that is student-friendly.
- Whenever possible, avoid negative wording in the options, and consider emphasizing it when it does occur.
- Avoid using “none of the above” as an option.
- Avoid using “all of the above” as an option.
- Avoid using structurally complex (“Type K”) items.

## 4. MINIMIZING CLUES FOR TESTWISE STUDENTS

- Check carefully for spelling errors, giving special attention to distractors.
- If you use sentence-completion format, check carefully for grammatical consistency of stem and options.
- Avoid clang associations.
- When writing the options, use specific determiners such as *all*, *always*, and *never* only with great care.
- Avoid patterns in the options that may provide clues to the key.
  - a. Do not let the keyed option be the longest response disproportionately often.
  - b. For numerical options, let the keyed option sometimes be either the smallest or largest value presented.
  - c. When each option includes a brief list of terms, avoid having the pattern of terms across options provide a clue to the key.
  - d. When the options include a pair of opposites, ensure that the keyed option is not a member of the pair disproportionately often.

## 5. GENERAL CONTENT ISSUES

- Avoid the use of humour.
- Avoid assessing students’ knowledge of trivia.
- Avoid trick questions.