

Writing Defensible Multiple-Choice Test Questions

(Summarized from a presentation by James Parker, psychometrician)

While multiple-choice questions are not always the most authentic assessment of students' learning, sometimes they are necessary. But how do you write a good (in psychometrician terms, defensible) multiple-choice question?

Each question must include

- A stem (statement or question to which learners respond);
- Four options
 - o 1 key (best or most appropriate of available options)
 - o 3 distractors (plausible yet incorrect options to the stem);
- A single, specific issue (as concretely as possible).

Stem Advice:

- minimize the amount of reading in each item (aim for grade 10 reading level);
- avoid vague frequency terms (e.g. always, never, often, usually);
- include the central idea of the question in the stem instead of the choices;
- ensure the directions in the stem are very clear;
- word the stem positively (i.e. avoid negatives such as NOT or EXCEPT, but capitalize if used);
- do not use "which of the following...";
- use "which" before a noun and "what" before a verb;
- don't write more than one sentence.

Options Advice:

- vary the location of the correct answer;
- ensure distractors and key all follow grammatically from the stem, and are homogeneous in content and grammatical structure;
- ensure all options are of the same length (count the numbers of words!);
- place options in logical (e.g. alphabetical or numerical) order;
- avoid "none of the above" and "all of the above";
- make all distractors plausible;
- phrase choices positively (avoid negatives, such as NOT);
- avoid clues to the right answer, such as
 - o always, never, completely, and absolutely;
 - o options that are identical or similar to words in the stem;
 - o grammatical inconsistencies that clue test-taker to the correct option;
 - o a conspicuously correct option;
 - o pairs or triplets of options that clue test-taker to the correct option;
 - o blatantly absurd, ridiculous options.

Terminology:

- spell out all acronyms;
- use "client with diagnosis of" instead of reference to disability, disease, ethnicity, etc.;
- avoid elitism (vocabulary related to socioeconomic status).