

How Do I Design Good Multiple Choice Questions?

Overall: Student assessment must be aligned with teaching objectives and should go beyond testing student ability to memorize facts. Good Multiple Choice Questions (MCQs) for formative (quizzes) and summative assessment (marks) will improve the value and quality of your teaching.

- Make sure that you have prioritized your teaching approach (sheet #2) and aligned your teaching objectives (sheet #3) with what you want students to be able to do when you've finished your teaching. Use appropriate verbs and [Bloom's Taxonomy](#);
- Design your MCQs in light of the verbs you have used in your objectives. Many of your questions may address basic knowledge, comprehension and application objectives. But not all (see below);
- In a MCQ, the stem is the question introduction, options are the choices, distractors are incorrect choices and the key is the correct answer;
- Be aware that the preferred MCQ format is "pick one correct answer" and is supported by solid data and psychometrics. See [The Graveyard of NBME Item Formats](#) for more information;
- An MCQ should have most information in the stem. The stem should be relatively long and the options should be relatively short. The stem should include all relevant facts. No additional data should be provided in the options;
- The stem should present the issue under consideration clearly and contain as much information as possible. Don't include irrelevant information in the stem unless it plays a role in your assessment;
- Check carefully for grammar, syntax in the stem and items. Spelling errors, particularly in distractors will give students clues to "rule out" such distractors;
- Try to keep distractors and the key as simple as possible and of the same length;
- Use only plausible distractors, e.g. students' most common errors, distractors that sound important or ones that are true but do not correctly answer the question;
- Be aware that completely valid (tests the objective) and reliable (tests consistently in different groups) questions can have as few as three options (choices). What is important is to have plausible options;
- Do not use "none of the above" as an option and remember that using "all of the above" can advantage a student with only partial information;
- Design some MCQs that test [Bloom's](#) levels of analysis and synthesis.
- Test your MCQs on colleagues who can often provide informative feedback;
- Additional information can be found in this [independent learning module](#).

Appropriately Shaped Item:

Long Stem

A.
B.
C. Short Options
D.
E.



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