Testing More Than Recall with Multiple-Choice Questions

Course assessments may include auto-graded quizzes or tests to ensure efficiency, especially if enrollments are large. Multiple-choice exams have the reputation of *not* assessing higher cognitive skills, and many multiple-choice exams *deserve* that reputation. However, carefully worded questions ("stems") and choices ("distractors") can, indeed, measure critical thinking, and do so in a very efficient way.

Follow these tips for writing good multiple-choice items.

Helpful Tips

1. **Make all distractors of similar length and format, and at least plausible.** If one choice has specific details or uses content-specific language and the others do not, the correct answer will be obvious to students which is the correct answer, even if they do not fully understand the content.

2. **Create situation-based or scenario-based questions.** Expect students to be able to select the best solution (choice) to a problem situation based upon their learning of specific content knowledge and skills*.* Write the scenario in a way that has only one "best" resolution based upon the course content, but has plausible distractors. Then, instruct students to "select the best response" or "select the action that best represents..." so they carefully consider each of the choices.

3. **Write cause-and-effect questions**. Create items that ask students to *apply* their learning by asking either *why* something happened (or is likely to happen) or *what impact* a particular action or event had (or would have). Some of these may be directly from their readings, your lectures or you could pose additional application-type situations.

4. **Consider using multiple-answer questions, but use them sparingly.** Students must think critically to correctly select *all* choices with a particular attribute, especially if the distractors are carefully chosen. Use this type of question sparingly, though, because too many of these would be quite tedious and frustrating for students.

5. **Limit the use of "all of these" or "none of these."** Sometimes test-developers want to out-smart the test-takers by providing such choices, but these types of questions are rarely good discriminators between students who know the content well and those who do not. If you *do* use these choices, do so in an application-based or scenario-based question, and be certain that "all of these" or "none of these" is actually the correct answer!

Most importantly,

Proof your test!

Be sure that questions and choices are clear and correct answers are provided and marked.