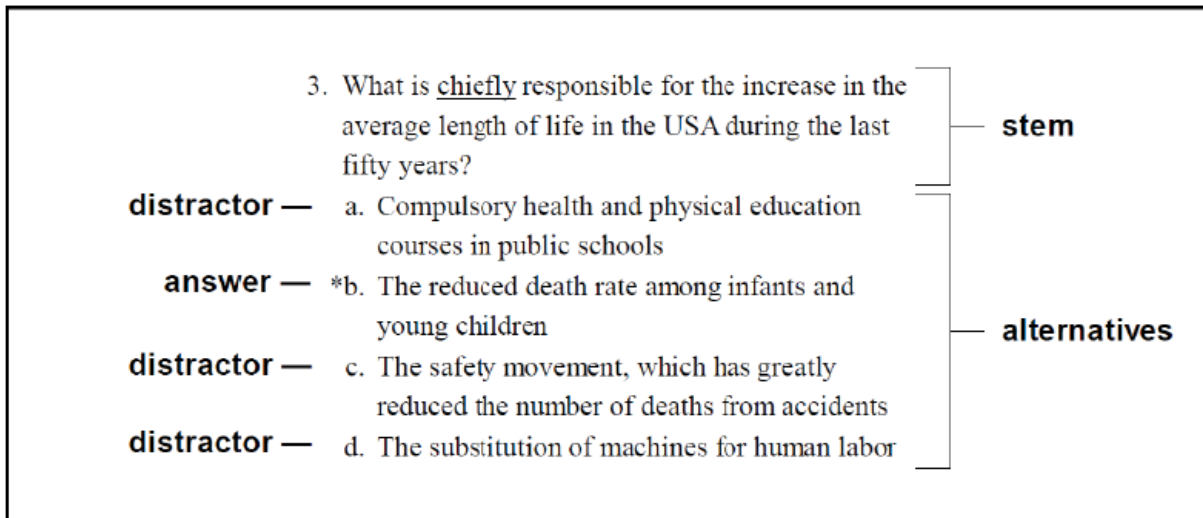# WRITING EFFECTIVE MULTIPLE-CHOICE QUESTIONS

INTRODUCTION

Multiple-choice questions are used commonly in online courses. They are versatile and efficient, and most course management systems provide a tool that automatically grades this type of question. Multiple-choice tests are reliable, and the higher number of questions a test has, the more reliable it is. For example, in a 25-question test, a student has a 1-out-of-942,651 chance of scoring 70% by guessing alone. These advantages are severely undermined, however, if the questions aren't well written.

Well-written multiple-choice questions can measure given objectives, whereas poorly written questions may confuse students and, therefore, lack validity in their measure of academic achievement.

A CLOSER LOOK

Breaking down the parts of a multiple-choice question will help you construct a well-written question.

The anatomy of a multiple-choice question*

The **stem** should be meaningful and present a clear problem. **Alternatives** should be plausible, stated clearly, and free of clues about which response is correct.

WRITING EFFECTIVE MULTIPLE-CHOICE QUESTIONS

UNIVERSITY OF WISCONSIN
extended campus

Checklist for Reviewing Multiple-Choice Questions

- Does the question test learners' mastery of key terms and concepts that relate to the learning objective(s)?
- Are the question and alternatives stated clearly and concisely?
- Do the alternatives sound plausible?
- Is there one and only one correct or clearly best answer?
- Has the answer been randomly assigned to A, B, C, or D?

- Are multiple-choice questions an appropriate way to assess mastery of the learning objective?

- Are alternatives plausible, or is it obvious they are incorrect?

EXAMPLE

The learning objective is "Learners will create an effective, asynchronous online course." In order to create a course, it will be important to acquire knowledge about the development process.

What is the most important part of a course?........**unclear (most or single most important), could be subjective**

  a. Learning objectives...**could be correct**

  b. Your favorite sports team...**clearly incorrect, no relevance to course design**

  c. Assessments...**could be correct**

  d. All of the above**..should be avoided (as should "None of the above")**

Hint: If you typically use all or none of the above as a fourth answer choice, consider using only three answer choices, which [research](#) shows results in higher scores and shorter quiz/exam completion times.

Let's try this again:

What learners achieve as a result of the course are called:.............................**clear, reinforces teaching of the term**

  a. Assessments...**incorrect, but related to course design**

  b. Learning objectives...**correct answer**

  c. Learning resources..**incorrect, but related to course design**

ADDITIONAL RESOURCES

- [How to Prepare Better Multiple-Choice Test Items: Guidelines for University Faculty](#) by Brigham Young University
- [Writing Good Multiple-Choice Test Questions](#) by Vanderbilt University
- [10 Rules for Writing Multiple-Choice Questions](#) by the eLearning Coach