

Test-Taking Strategies

Tips for Taking Multiple-Choice Exams

Multiple choice questions (MCQs) are a very common format for assessing learning. They consist of a stem and of four to five answering options or alternatives.

- Typically, one option is **the best answer** and others are **distractors**.
- Multiple questions might include one option that combines two as correct (e.g., the correct option is d which includes b and c as correct).
- A very common format of MCQs in the health professions is a clinical case or a vignette which is presented in a stem and followed by a question at the end. Except in classes, medical students will have these types of questions on NBME and USLME exams.
- **READ A QUESTION CAREFULLY** no matter what type of question it is! In examples where you have clinical case presented, followed by a question at the end, if you **read the question first**, it will provide you direction for what do you need to focus on while reading a stem.

Time-using Strategy

- Set up a schedule of your progress throughout the test and how far you should be at the specific part of the test. When dividing time among test questions, you might include a few extra minutes to review difficult questions after completing the test.
- Check on rate of progress periodically, but don't check time too often because it will affect your concentration, and you will lose time by checking it frequently.
- If a question is too difficult for you, and you cannot answer it quickly, **don't spend too much time on that question**. You want to have enough time for questions that you know how to answer. Always guess if only correct answers are scored, and there is no penalty for guessing.
- Mark or "flag" questions that need further consideration or questions that you omitted, so you can quickly find these questions later.
- Use time remaining after finishing the test to work on questions that you "flagged."

Error Avoidance Strategy

You don't want to lose points on questions that you know how to answer because of your careless mistakes.

- Pay attention to directions how to take tests.
- Stems can be written as a negative statement: Which of the following is **NOT CORRECT**, or all of the following is correct **EXCEPT**. You will need to make sure to read these negative types of statements correctly.
- Ask for clarification of a question if it is permitted.
- Check all answers before selecting the best.
- Answer all questions.

Guessing Strategy

- If you don't know the answer, always guess if there is no penalty for guessing.
- If you have to guess, avoid answers that you never heard of.
- The correct option is usually **placed in the middle** position among other options.
- If options include values and the numbers that are extreme, **most likely a middle value** will be a correct answer.

Other Methods

You can use other methods that can help you to find the correct answer with partial knowledge of the content by recognizing characteristics of test items. The test-taker capacity to utilize test characteristics' to improve their test score was defined as a **test-wiseness** (Millman et al., 1965).

1. Deductive Reasoning Strategy

- Ability to deduce the answer by **logical analysis** or by using information from other questions on the test.
- The correct answer might be revealed in another test question.
- Eliminate options that are **known to be incorrect** and select the best answer among the remaining options.
- Eliminate an option that is **logically inconsistent with a stem**.

The capitol city of the state of Alabama is

- a) Birmingham
- b) Mobile
- c) Illinois*
- d) Montgomery

Illinois is a state and should be eliminated first. Select the correct answer from remaining options.

- **Two options are similar:** If **two options imply correctness of each other**, select **neither or both** only if two options can be correct.

The sigma effect of the Fahraeus-Lindqvist phenomena is related to

- a) the flow of liquid through the kidney
- b) muscular contractions of the kidney
- c) the kidney's transmissions of fluids
- d) the diameter of the red cells flowing through the kidney's blood vessels
(Millman, 1996) (p. 204, as cited by Rogers and Bateson, 1994)

A and C are similar, so neither of them can be selected as a correct answer. Selection should be done among B and D.

- Two options are **opposite**; therefore **one or the other** can be correct or **neither** of them.

If ribulose biphosphate were removed from a chloroplast, which of the following statements would BEST describe the immediate result?

- CO₂ could not enter the Calvin cycle
- ATP could not be produced in the thylakoid
- O₂ could not enter the Calvin Cycle
- Light energy could not be trapped in the grana (p. 205, as cited by Rogers and Bateson, 1994).

A and C are opposites, so you will select either one of them or neither of them.

Adding number of items to a test will

- increase test's reliability*
- decrease test's reliability
- decrease cost of test administration
- increase performance on a test

Again, A and B are opposites, so you will select either one of them or neither of them.

2. Cue-using Strategies

When you don't know an answer, you can use cue-using strategies which can help you to select the best answer. **Be careful because cues might not always be effective!**

- **The longest option** is usually correct because test constructors put the most information in that option.

The example below was taken from the NBNE: Item Writing Manual: Constructing Written Test Questions for the Basic and Clinical Science (3rd ed.). Technical Items Flaw (p. 9-27). <http://www.nbme.org/publications/item-writing-manual-download.html>

Long correct option is longer, more specific, or complete than other options

Secondary gain is

- Synonymous for malingering
- a frequent problem in obsessive-compulsive disorder
- a complication of a variety of illnesses and tends to prolong many of them
- never seen in organic brain damage (p. 21)

- **Recognize the use of specific determiners**

Options that include **absolutes are usually incorrect**:

- always
- must
- necessarily
- never
- not at all
- only
- without exception

Examples of **specific determiners** in options which are **probably true**:

- can
- may
- often
- seldom
- perhaps
- frequently
- generally
- sometimes
- ordinarily
- possibly
- some
- usually, etc.

- **All of the above** is frequently a correct option. Check the other options by answering true or false. (an example)

Behavioral therapies are used for treatment of

- a) Phobias
- b) Addictions
- c) Maladaptive habits
- d) All of the above

- **None of the above** is usually an incorrect option.
- Select an option that **agrees grammatically with a question**. Pay attention if a stem ends with a, or an, plural, or singular.

An emotional bond that one person forms with another person is called **an**:

- a) Synchrony
- b) Attachment
- c) The Strange situation
- d) Base for exploring
- e) None of the above

- A stem and a question can include **a repetitive statement, word or synonym** that can help you to select the best answer.

In somatoform disorders, patients use, which of the following defense mechanism

- a) denial
- b) dissociation
- c) displacement
- d) somatization

Additional Resources

Test wiseness strategies or set of skills that test taker can use to improve their test score are described with examples in the NBME Item Writing Manual: Constructing Written Test Questions for the Basic and Clinical Science (3 rd ed.). Technical Items Flaw (pp. 9-27): “grammatical cues, logical cues, absolute terms, long correct answer, word repeats, convergence strategy” (p. 26), and followed with examples of questions.
<http://www.nbme.org/publications/item-writing-manual-download.html>

National Board of Medical Examiners website <http://www.nbme.org/>

Cues strategies are described as test-taking skills or test-wiseness in a following article with examples of questions in the appendix (p. 6). Mahamed A, Gregory PA, Austin Z. (2006). “Testwiseness” among international pharmacy graduates and Canadian senior pharmacy students. American Journal of Pharmaceutical Education, 70(6), 13.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1803693/>

Most common cues-strategies are also listed in a handout of the University of Central Florida: Student Academic Learning Sources, Multiple-choice test taking strategies with available test to practice these strategies. <https://sarconline.sdes.ucf.edu/?p=660>

References

Millman J, Bishop CM, Ebel R. (1965). An analysis of test-wiseness. Educational & Psychological Measurement, 15, 707-726.

Rogers, W. T., Bateson, . J. (1994). Verification of a model of test-taking behavior of high school seniors. The Alberta Journal of Educational research, 15, 2, 195-211.

Rogers, W. T., Yang P. (1996). Test-wiseness: Its nature and application. European Journal of Psychological Assessment, 12(2). 247-259.