

Multiple choice: Revered or feared?

Do you like multiple choice tests or fear them?

Although some students like having the possible answer given to them, many students find multiple choice questions very difficult. Why?

Interestingly, it's not the content that is difficult but the structure.

Why is the structure so difficult?

1. There are many questions to answer and the topics are often scrambled and shuffled.
2. Ideas from lectures and/or readings may be reworded in different/unfamiliar ways.
3. Very often the question is not asking for simple recognition of ideas but asking you to go beyond straight memorization and apply knowledge from the course, make an analogy, solve a novel problem. Professors assume you are capable of memorizing details.

What are the different question types?

Type 1: Explicit knowledge question

Tests knowledge taught in lectures and texts (about 1/3 of the questions!)

Study Strategy: can simply memorize

Level of Difficulty: easiest

Type 2: Finer detail question

Asks you go to beyond straight memorization of concepts and see how the details relate to the concept.

E.G.

Which of the following is not related to the process of elaborative rehearsal?

- a) adding details to ideas and concepts
- b) analyzing component parts of an idea
- c) restating knowledge in your own words
- d) practicing remembering the information
- e) none of the above

Study Strategies: elaborate and draw connections between the concept and its evidence.

Level of Difficulty: more difficult than Type 1

Type 3: “Thinker” question

Tests your ability to understand the relationship between a theory and its evidence and then apply this understanding to —cope with a hypothetical relationship.

E.G.

In the study by Bahrck and Hall (1991) we find that graduates of college mathematics courses recall high school math knowledge for many years after. According to Bahrck and Hall, which of the following would you expect to be true of a group of university graduates who did not take math courses at university:

- a) they would recall their math from high school to essentially the same extent as those who took math courses in university
- b) most would recall little or none of their high school math 50 years after
- c) they would recall best those things which they learned more about in their university course
- d) both b) and c)
- e) all of the above

Study Strategies: practise recalling the theory, elaborative review, and some creative thinking, i.e., what might change in a variety of slightly different circumstances from those presented in the theory.

In-test Strategy: read the question twice to ensure you understand it correctly. The question stem is made up of two parts: 1) the context reference for the question (tells you to think back to something you’ve studied) and 2) the question part. Pause after the first part and recall the theory or research study. Next, because the alternatives in this question are usually quite long, try reading the question part of the stem followed by each alternative, to keep clear on what you are being asked.

Level of Difficulty: hardest. These questions are appearing more and more on multiple choice tests, so don’t avoid preparing for them!

(Answers: 2. e; 3. d)

MORAL OF STORY:

Multiple choice tests are NOT simple. They require a rigorous approach to study.

Multiple choice exam strategies

Key concepts for multiple choice exam preparation

Memorization/recall and recognition of details are not enough. Focus on complex levels of thinking: understanding, connecting, applying, analysis. **Practice: Use old exams, study guides.**

Strategic approaches to writing multiple choice exams

Breathe, focus and perhaps — dump information you are worried about forgetting Check timing — how many questions? average time per question?

1. How to approach the exam overall: The 3 Pass Method

Pass # 1: Begin by answering the questions you know, in the exam booklet, then transfer the answers on to the Scantron sheet, in groups of 10 questions.

Code the answers you don't know — e.g. use a “?” for the ones you have some idea about but need more time to think about, and an “X” for the ones that you have no idea about at all. Move on to questions you feel more confident about. Feel good! You've just earned marks 😊

Pass # 2: Next, return to the questions marked with the “?”, answer these directly on the Scantron, so you don't misrecord any questions.

Pass # 3: Checking the time left, begin guessing the ones marked “X” on the Scantron.

2. How to approach individual questions

1. Read the stem SLOWLY
2. Process it by underlining key words
3. Cover the answers
4. Predict answer. Not there? Then process the options - e.g. Is this the most correct?
5. Eliminate wrong answers, and select the best option

3. Strategies for guessing (a LAST resort)

- Avoid answers with extreme values — either numbers or statements
- Choose inclusive answers e.g. all or none of the above
- Choose the longest answer
- Choose b or c

If there is no penalty for incorrect responses, and no time left, when all else fails, randomly fill in the Scantron.

Adapted from: Learning Skills Programme. (1997). *Preparing for Tests and Exams*. Counselling and Development Centre, York University, Toronto. pp.10-15.

Writing the multiple choice exam: Ready, set, go!

READY...

1. Breathe and calm yourself
2. Survey the exam
 - give yourself a bit of time to go back to hard ones
 - mark where you should be done halfway
3. Determine the grounds rules
 - read directions
 - is there a penalty for guessing? If not GUESS!

SET...

1. Read questions carefully, slowly, start from the beginning
2. Cover up the options. Do you already know the answer?
3. Underline key words to focus your attention

GO!

1. Read all the options. Choose the BEST answer – there may be multiple correct ones!
2. Eliminate options if you know it's definitely wrong
3. Watch for qualifiers (e.g. all, usually, almost, good, best, normally, etc.)
 - think about how they define or limit the stem or options. Be alert to unstated qualifiers which define an option e.g. "Birds fly south in winter" means ALL birds.
4. Watch for negatives
 - two negatives make a positive (e.g. "It is atypical for children NOT to go through the following stages" = "it IS typical for children to go through...")

If after all that, you still don't know ...

5. Use Educated Guessing
 - for compound options (e.g. "all of the above"), select the compound including simple options about which you are certain
 - avoid extreme values, either numbers or statements
 - change answers only if you have a good reason to do so
 - check for lookalike options. One of them is usually OK.
 - "all of the above" can be a good guess
 - options looking foolish, incongruous or unfamiliar or usually incorrect

What to do if you hit a WALL?

1. Mark difficult questions and come back to them – don't let yourself get stuck
2. Keep your process active (re-read question, make marks, write notes...you can do this!)