



# 1. How can I write effective multiple choice questions?

- A. Employ evidence-based best practices.
- B. Don't write all your questions in one sitting.
- C. Make incorrect answers (known as distractors) plausible.
- D. Randomize correct answers to avoid patterns.
- E. All of the (A., B. C. and D.) above are correct.**



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# Session Objectives:

- Introduce and emphasize best practices for writing MCQ
- Provide extensive resources for improving MCQ writing
- Socialize test writing by providing examples of ways to improve
- Provide an opportunity to collaborate with peers on MCQ writing

# Pair and Share

- Think of at least two BARRIERS to writing effective MC questions
- For 60 seconds, share with your neighbor
- Consider similarities and unique features



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# Discussion: Barriers We Know



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# Resources for Writing Good MC Questions

## From *Faculty Focus* by Maryellen Weimer

- <https://www.facultyfocus.com/articles/teaching-professor-blog/writing-good-multiple-choice-questions/>
- <https://www.facultyfocus.com/articles/teaching-professor-blog/examining-multiple-choice-questions/>

# Resources for Writing Good MC Questions

## BYU [Testing Center](#) & Center for Teaching and Learning)

- How to Prepare Better Multiple-Choice Test Items: Guidelines for University Faculty PDF  
(<https://testing.byu.edu/handbooks/betteritems.pdf>)
- 14 Rules for Writing Better Multiple Choice Questions PDF  
(<https://testing.byu.edu/handbooks/14%20Rules%20for%20Writing%20Multiple-Choice%20Questions.pdf>)

# Some Best Practices for Effective MC Questions

- Use a question format rather than an incomplete statement
- Focus the stem of a MC question on single, defined problem (perhaps tied to your detailed, specific student learning outcomes)
- Write the stem (revise as needed) then the correct/best answer, adding plausible distractors

# Some Best Practices for Effective MC Questions

- Avoid indicating the correct answer unintentionally
  - Correct answer is longer than other options
  - Correct answer is the only option that fits grammatically
  - Correct answer is always “C.”
  - Correct answer is “never” the one with “always” or “all”



# Some Best Practices for Effective MC Questions

- Avoid “All of the Above” options
- Avoid “None of the Above” options
- Avoid Negative Questions

# Some Best Practices for Effective MC Questions

- Strive for higher-ordered questions
- You may wish to have an entire exam with a balance between lower- and higher-ordered questions

# Some Best Practices for Effective MC Questions

- Analyze your results and reflect on these analyses:
  - Item analysis data from Scantron or Blackboard
  - Determine the usefulness of a question within an entire exam and with regard to your learning outcomes
- Understand how the student performance reflects your instruction

# Some Best Practices for Effective MC Questions

## What do those present suggest?

# Some examples!

1. Which of the following symptoms are diagnostic for inhaled *Bacillus anthracis*?
  - A. Blocked airway syndrome.
  - B. Cardinal's Cap.
  - C. Diarrhea.
  - D. Eschar lesion.
  - E. Sinusitis.



# Some examples!

1. Bacteriophage T4 is
  - A. A Baltimore class III virus.
  - B. A ds DNA virus.
  - C. Bound to host cells through capsid proteins.
  - D. Released slowly from an infected cell.
  - E. Only (b.) and (c.) above are correct.

# Some Best Practices for Effective MC Questions

- Have a colleague read your MC questions and provide feedback



# Discussion: What can you apply?



# Summary: To Improve your MC Question Writing

- Know and follow evidence-based best practices
- Work ahead of time to allow for feedback from colleagues
- Analyze and reflect on the assessment, looking for ways to improve
- Repeat

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**Wednesday June 21**

**Susan Matthew**

**Establishing a Culture for Effective Groups**

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