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.
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
Discussion: Barriers We Know
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/writing-good-multiple-choice-questions/)

- [https://www.facultyfocus.com/articles/teaching-professor-blog/examining-multiple-choice-questions/](https://www.facultyfocus.com/articles/teaching-professor-blog/examining-multiple-choice-questions/)
Resources for Writing Good MC Questions

BYU *Test 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
Please complete a survey about this Summer Toolkit Session NOW

https://wsu.co1.qualtrics.com/jfe/form/SV_7O1SkfbgLmZAtil

Short URL: goo.gl/JLIC9z
Wednesday June 21
Susan Matthew
Establishing a Culture for Effective Groups