

## PIE Workshop - Creating Multiple Choice Questions that Test Critical Thinking, June 25, 2018

### MCQ Best Practices: The Stem

- Word the stem clearly and concisely
- Relate questions to important information only
- CAPITALIZE and bold qualifying words
- Avoid qualifiers such as “always” and “never”
- Use positive wording; no “not”s  
Include only one correct and best answer
- Put similar wording in the stem rather than the options (while aiming for succinctness)

### MCQ Best Practices: The Options

- Use plausible distractors
- Place options in some logical order (ex. by length, numeric)
- Include only one correct and best answer
  - Avoid “all/none of the above” options
- Don’t use the same word in the key as in the stem
- Compose parallel wording and lengths
- Follow grammatically from the stem
- Use uppercase letters (A, B, C, ...); five or fewer responses

### MCQ Best Practices: General Do’s and Don’ts

- Do not use the questions as a teaching opportunity
- Do not quote from the textbook
- Do not use words with more than one meaning
  
- Do label the taxonomic level of your questions
- Do ensure the question is free from bias
- Do ask for feedback from a colleague
- Do critically assess the quality of the questions with the available analytics

### Advantages of MCQs

- Cover a wide range of information
- Do not depend on students’ writing ability
- Permit objective scoring
- Statistical analysis and diagnosis
- Student familiarity with question type
- Incorporate various taxonomic levels

### Disadvantages of MCQs

- Hard and time consuming to do really well
- Can appear too picky
- Can not go to the top of Bloom’s taxonomy