Revised Taxonomy of Multiple-Choice Item-Writing Guidelines
(adapted from Haladyna, Downing, & Rodriguez, 2002)

Content concerns
1. Every item should reflect specific content and a single specific mental behavior, as called for in test specifications (two-way grid, test blueprint).
2. Base each item on important content to learn; avoid trivial content.
3. Use novel material to test higher level learning. Paraphrase textbook language or language used during instruction when used in a test item to avoid testing for simply recall.
4. Keep the content of each item independent from content of other items on the test.
5. Avoid over specific and over general content when writing MC items.
6. Avoid opinion-based items.
7. Avoid trick items.
8. Keep vocabulary simple for the group of students being tested.

Formatting concerns
9. Use the question, completion, and best answer versions of the conventional MC, the alternate choice, true-false (TF), multiple true-false (MTF), matching, and the context-dependent item and item set formats, but AVOID the complex MC (Type K) format.
10. Format the item vertically instead of horizontally.

Style concerns
11. Edit and proof items.
12. Use correct grammar, punctuation, capitalization, and spelling.
13. Minimize the amount of reading in each item.

Writing the stem
14. Ensure that the directions in the stem are very clear. Use the third person (i.e., he/she/it/they...avoid “you")!
15. Include the central idea in the stem instead of the choices.
16. Avoid window dressing (excessive verbiage).
17. Word the stem positively, avoid negatives such as NOT or EXCEPT. If negative words are used, use the word cautiously and always ensure that the word appears capitalized and boldface.

Writing the choices
18. Develop as many effective choices as you can, but research suggests three is adequate.
19. Make sure that only one of these choices is the right answer.
20. Vary the location of the right answer according to the number of choices.
21. Place choices in logical or numerical order.
22. Keep choices independent; choices should not be overlapping.
23. Keep choices homogeneous in content and grammatical structure.
24. Keep the length of choices about equal.
25. None-of-the-above should be used carefully.
26. Avoid All-of-the-above.
27. Phrase choices positively; avoid negatives such as NOT.
28. Avoid giving clues to the right answer, such as:
   a. Specific determiners including always, never, completely, and absolutely.
   b. Clang associations, choices identical to or resembling words in the stem.
   c. Grammatical inconsistencies that cue the test-taker to the correct choice.
   d. Conspicuous correct choice.
   e. Pairs or triplets of options that clue the test-taker to the correct choice.
   f. Blatantly absurd, ridiculous options.
29. Make all distractors plausible.
30. Use typical errors of students to write your distractors.
31. Use humor if it is compatible with the teacher and the learning environment.
Multiple-Choice (MC) Item Formats
(adapted from Haladyna, Downing, & Rodriguez, 2002)

Conventional MC
Which of the following most clearly defines the process of pollination?
   A. The joining of egg and sperm cells.
   B. The transfer of pollen grains to the pistil.
   C. Food is broken down and energy is released.

Alternate-Choice
Which of the following would most effectively slow down the process of respiration in plants?
   A. Cold weather
   B. Stormy weather

True-False
The capital of Uruguay is Montevideo.

Multiple True-False
You are an expert organic farmer. You know the secrets of growing strong, healthy plants. Which of the following would describe your farming practices? (Mark A if true, B if false.)
   1. When you plant some beans you make certain that the beans will be well shaded to receive little to no light.
   2. When you plant your seeds you make sure to water them and continue to keep the soil moist.
   3. You plant your seeds only when the temperature is appropriate.
   4. Because you know how pollination occurs, you spray your crops with insecticides to prevent bees and other insects from harming your crops.

Matching
Match each term on the right with the description on the left.

1. Attracts bees
   A. Pollen grains
2. Produces pollen grains
   B. Petals
3. Houses the egg cells
   C. Flower
4. Seeds are formed
   D. Stamen
5. Contains the ovary
   E. Ovary
   F. Pistil

Complex MC
Which of the following are fruits?
1. Tomatoes
2. Tomatillos
3. Habanero peppers
   A. 1 & 2
   B. 2 & 3
   C. 1 & 3
   D. 1, 2, & 3
Context-Dependent Item Set
Imagine you are a delegate from Massachusetts to the Constitutional Convention. You have been authorized to act on behalf of your state.
1. You would most likely approve of the
   A. New Jersey Plan.
   B. Virginia Plan.
2. You would oppose the three-fifths compromise because
   A. Your state, as a rule, is strongly abolitionist.
   B. You will be grossly outrepresented in Congress by northern states.
   C. You want only a single representative house.
3. You support the suggestion that Congress tax
   A. Imports.
   B. Exports.
4. Because of your state’s experience with Shays’ Rebellion, you feel
   A. Farmers should not have to carry the tax burden for townspeople.
   B. Native Americans must be pacified before there can be peace.
   C. Tories ought to pay reparations.

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