

Tips for constructing assessments

Adapted from: Teaching at Its Best: A Research-Based Resource for College Instructors by Linda B. Nilson

Multiple choice/Select all

Advantages	Disadvantages
<ul style="list-style-type: none"> ● Easy and quick to grade ● Can efficiently assess remembering, understanding, application, analysis, evaluation, and creating ● Useful as a diagnostic tool (wrong choices can indicate misconceptions) ● Familiar to students 	<ul style="list-style-type: none"> ● Sometimes difficult and time-consuming to construct ● Encourages students to find the correct answer by process of elimination

- Write the correct response first, then the distractors (incorrect responses)
- Juggle the elements or variables of a correct response, or substitute a correct variable for one that students confuse it with to create distractors
- Make all responses grammatically parallel and about the same length
- Make all responses equally plausible and attractive
- Address one concept per question
- Strive for clarity and conciseness
- Present the options in some logical order to resist cuing student into a pattern
- Use 3-5 responses per question
- Incorporate graphics where appropriate
- If you use “all of the above” or “none of the above,” use it liberally (not just when that answer is correct)
- Include in the stem any words that may repeat in the response alternatives
- Use familiar language but avoid lifting phrases directly from lecture (this reduces thinking to simple recall)
- Make no, not, never, none, and except stand out by bolding or underlining

True or False

Advantages	Disadvantages
<ul style="list-style-type: none"> ● Usually easy to prepare and grade ● Can test a lot of material in a short time ● Can tap higher levels of cognition by having students correct false statements ● Useful as a diagnostic tool if students have to explain 	<ul style="list-style-type: none"> ● High guessing factor ● May be difficult to think of unequivocally true or false statements ● Encourages instructors to test trivial factual knowledge ● Truly knowledgeable students may see too many nuances, multiple meanings, or conceive of exceptions ● May contain verbal clues (never, always, and every indicate false)

- Focus each statement on a single idea
- Write positive statements (avoid negative or double negative)
- Avoid verbal cues (usually, seldom, often, never, always, every)
- Use only statements that are entirely true or entirely false
- Avoid making true statements long and false statements short (or vice versa)
- Avoid direct quotes (requiring memorization)
- Add higher level cognition by having students justify or rewrite false statements to make them true

Short Answer

Advantages	Disadvantages
<ul style="list-style-type: none"> • Easy to construct • Can assess remembering, understanding, application, analysis, evaluation, creating • Requires a command of vocabulary or problem-solving skills • Very useful as a diagnostic tool • Encourages instructors to give students individual feedback 	<ul style="list-style-type: none"> • Time-consuming to grade • Difficult to standardize grading due to variability across answers

- Be very specific and concise in identifying the task that students are to perform
 - Identify all the key points students should address
 - Instead of using what, why, or how, choose a descriptive verb that reflects what you want students to do
- Use familiar language from lecture, but new examples are great!
- Specify that students should show their work/thinking for full credit on problems, or if an illustration is required.
- Leave an appropriate amount of space for the answers. In some cases you may even want to specify the length of answers you are looking for.

Fill in the Blank

Advantages	Disadvantages
<ul style="list-style-type: none"> • Easy to prepare and grade • Can test a lot of material in a short time • Assesses student's ability to remember (recall & vocabulary) • Eliminates guessing 	<ul style="list-style-type: none"> • Cannot assess higher levels of cognition • Highly structured and inflexible • Not useful as a diagnostic tool • May include grammatical clues • Difficult to construct so that the desired response is unambiguous

- Use clear wording to elicit a unique response
- Avoid grammatical cues (use as/an and is/are)
- Omit words from the middle or end of a statement, not the beginning
- Make all fill lines the same length
- Use familiar language (similar to lecture)

Additional tips

- Consider the background of your students, and eliminate any unnecessary jargon
- If several questions on an assignment are based on a single scenario or set of information:
 - Minimize interlocking items (i.e. getting the first part of the question wrong leads to getting all later parts of the question wrong)
 - A longer or more complex set-up should be accompanied by a longer series of questions

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