Tips for Improving Teacher Made Tests

In this thoughtful Educational Leadership article, SUNY/New Paltz professor Spencer Salend describes how a middle-school faculty puzzled over the discrepancy between students' seeming mastery of material during classes and poor performance on teacher-made unit tests. When they asked students for anonymous comments, here's some of what they heard:
- "The tests don't cover many of the things we learned in class."
- "We spent most of our time learning about one thing, and there was only one question on that topic."
- "You don't give us enough space to write our answers."
- "The directions were confusing."
- "The questions are like you're trying to trick us."
- "It's hard to remember everything because we had two tests on the same day."
- "Sometimes I get so nervous and frustrated I give up."

In other words, the teacher-made tests had some serious deficiencies. "Invalid tests are unfair and of little value in helping teachers assess learning or determine fair grades," says Salend. Working with schools like this one, he has developed the following guidelines, strategies, and models for creating tests that are valid, reliable, and student-friendly:

1. ***Determine the scope and weight of test items***. A test should cover the main topics, concepts, and skills of the curriculum unit, and there should be a manageable number of items in proportion to the importance and difficulty of the content.
2. ***Use appropriate items***. What makes tests "tricky" is when they assess material in an entirely different way than it's presented in class. Good test items should match teaching modalities; for example, classroom role-plays, simulations, cooperative learning, and problem-solving are best assessed with essay questions; factual knowledge is best assessed with multiple-choice items.
3. ***Schedule sanely***. Teachers should coordinate their tests so students aren't overwhelmed by the content and amount of testing time. In addition, it's better to give more-frequent tests on a narrower range of content than infrequent tests on large amounts of material.
4. ***Make tests accessible.*** They should have clear, succinct directions, explicit information on how much each item counts, good graphics (e.g., not too many items on a page or words in each line, readable type faces and size, no right-justified formats, and good use of boldfacing), and be readable by all students (e.g., short sentences and familiar language). Salend recommends this website: http://peabody.vanderbilt.edu/Documents/pdf/LSI/TAMI.pdf.
5. ***Reduce test anxiety***. Teachers can embed phrases like "Take a deep breath" within tests and prompt students to stay focused, calm, and motivated. Giving students choices is also helpful to building engagement and reducing stress.
6. ***Avoid unfair questions***. Salend says multiple-choice items should provide the context for the answer and any relevant material and terminology, contain only one major point, and distractors should all be viable choices that are shorter than the stem and share common elements. "To eliminate visual confusion, present answer choices vertically, ordered in a logical sequence," he says. "Highlight keywords in the stem, limit the number of voices to no more than four, and eliminate such choices as all of the above and none of the above."
7. ***Use true-false questions wisely***. Students' difficulty with this type of item is reduced if each item presents only one important point or relationship, uses declarative statements that are clearly true or false, offers meaningful information and the context for responding, highlights important parts of items, avoids double negatives and tip-off words like all, entirely, or never, spells out True and False as options (versus T and F), and draws on material that has been explicitly taught (versus depending on intuition, common sense, or general knowledge).
8. **Make sentence-completion items fair**. The stem should contain enough information to identify the answer, and there should be one clear answer, usually one word or a short phrase; see http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_201111_Salend_Examples.pdf.
9. ***Make essay questions fair***. Essays demand numerous skills, and teachers can minimize the challenges by giving a focused, well-written prompt, specifying the essay's length and the criteria that

will be used to evaluate it, and giving students enough time to write. It might also be appropriate to allow students to refer to books and notes as they write.

10. ***Monitor students' performance and affect***. Well-written tests should produce higher achievement and happier, less-anxious students.