

most part, evaluate *specific* instructional objectives. For example, if the objective “to diagram simple, compound, and complex sentences” is the focus of a test, and the teacher projects an average class performance of 90 percent, then a score of 90 percent or higher would indicate the students know how to diagram sentences. If the students do poorly, for example, by scoring an average of 70 percent, the material obviously needs to be reviewed and retested. Are tests limited to testing only one objective at a time? Of course not. The number of objectives tested on a given test and the teacher’s desired student performance will depend entirely on the teacher. Scannell and Tracy (1975) state that “the objectives a test should cover should be the same as those that guided and influenced the instruction, with the exception of objectives which have been measured satisfactorily through non-test means.”

Does this mean that test questions should be based on corresponding instructional objectives? In most instances, yes. However, objectives may not be written in a measurable instructional objective format, or they may not be written at all. They are more or less in the mind of the teacher, but no one else knows what they are. In such instances, the teacher does not test to objectives, but functions, so to speak, as his or her own curricular guide, a guide based on memory, experience, and textbooks instead of written curricular guidelines such as scope and sequences and instructional objectives. However, for those who teach by objectives, the core objectives for each course are in writing, and in many instances, so are the sub-core objectives. A general premise in testing is “If a test question is not based on an objective, whether the objective is in writing or not, what is the purpose of the question?”

Responsive to Small Variations in Knowledge

The third strength of teacher-made tests is the assessment of small increments of knowledge. Teacher-made tests usually cover a limited amount of material, for example, one to four or five instructional objectives, a chapter or a portion of a chapter, two to five days of classroom instruction, a laboratory experiment, etc. Teachers need tests that consist of relevant test items that address a narrow range of instructional objectives.

Convenience

The fourth strength of teacher-made tests is convenience. Good tests are relatively easy to prepare, assuming the teacher knows how to write valid, reliable test questions. A teacher-made test can be tailor-made to assess subject content as

many times as needed for the students to acquire mastery of specific content and skills. With a few days notice (or, as some teachers would argue, a few hours notice), a good test that measures exactly what the teacher wants to measure can be written and produced for the classroom.

Expense

The fifth advantage of teacher-made tests is expense. Teacher-made tests are relatively inexpensive to produce. Compared to the cost of publisher-prepared tests, teacher-made tests are much more economical. They can be reproduced on a ditto or stencil machine, risograph, or copier. The computer provides an added dimension to test construction: it allows teachers to add a touch of professionalism to their tests. The tests can be filed on a floppy disc or hard disc for future use. With a few modifications, a new test can be easily produced from previous tests.

Teachers Determine Type of Test Questions

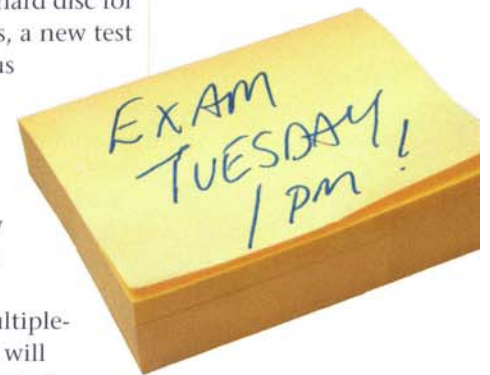
Finally, teacher-made tests allow teachers to determine the type of test questions (for example, true/false, sentence-completion, matching, multiple-choice, problem solving, essay) that will appear on the test. The difficulty level of questions, the number of questions, and the point value of each question is determined by the teacher. Teacher-made tests give teachers total control of the test-item selection process.

Weaknesses of Teacher-Made Tests

Teacher-made tests are not without their weaknesses. Understanding these weaknesses will strengthen the teacher’s use of teacher-made tests. The weaknesses of teacher-made tests should not be interpreted as reasons to avoid their use. On the contrary, they point out the pitfalls to avoid when constructing and using teacher-made tests. Once identified, these pitfalls can be eliminated. Furthermore, the weaknesses of teacher-made tests do not mean publisher-tests provide superior advantages.

Teacher Determines What to Test

The most obvious weakness of teacher-made tests is that they test only what the teacher wants to test. In this sense, the greatest strength of teacher-made tests is also its greatest weakness. For example, the teacher can intentionally or unintentionally avoid testing essential portions of subject content from a chapter, unit, or course of study. In some instances, an entire chapter or unit could be excluded, even though the



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subject's scope and sequence directs otherwise. The material excluded from a teacher's teacher-made test may be considered as essential course content by the teacher's peers.

Does this mean that *all* the material in a textbook must be taught? Certainly not. The instructional objectives and scope and sequence determine what is taught. The issue is not the omission of certain material; the issue is the random exclusion of material without any thought given to the scope and sequence and instructional objectives. Equally as devastating is omitting information from classroom discussions because the teacher does not enjoy teaching it or does not feel knowledgeable enough to instruct the students effectively.

However, this weakness does not nullify the major advantage of teacher-made tests—testing *only* what the teacher teaches. The teacher should control the subject content taught and the corresponding test questions, but not by omitting important material or testing irrelevant facts and concepts. Teaching to the instructional objectives within the confines of the course's scope and sequence and instructional objectives will eliminate this weakness.

Inferior Construction of Test Items

A second weakness of teacher-made tests is inferior test-construction. Some teachers simply do not know how to construct quality test questions. They throw test questions together as though they were making a garden salad for an evening meal and company will arrive in twenty minutes. Irrelevant and poorly worded test questions have no meaningful purpose; they serve only to confuse students, lower test scores, and invalidate tests. Poorly constructed teacher-made tests fail to produce an accurate assessment of the students' academic accomplishments and the effectiveness of the teacher's instruction.

Why do some teachers have difficulty writing reliable test questions? Without sounding simplistic, they have never learned how to write reliable, valid test questions. Writing good test questions requires a knowledge of more than the subject content tested; it requires an understanding of test-construction principles. Without this knowledge, teachers are limited in their test-construction skills. The limited time allocated to the construction of test questions in college contributes to this weakness. In defense of class-

room teachers, they have received very little quality instruction in test construction. When a teacher is employed by a school, the principal usually assumes the teacher knows how to construct valid and reliable tests. Quality staff development in this area would help teachers better understand the mechanics involved in constructing good test questions.

Overuse of Questions That Are Too Easy or Too Difficult

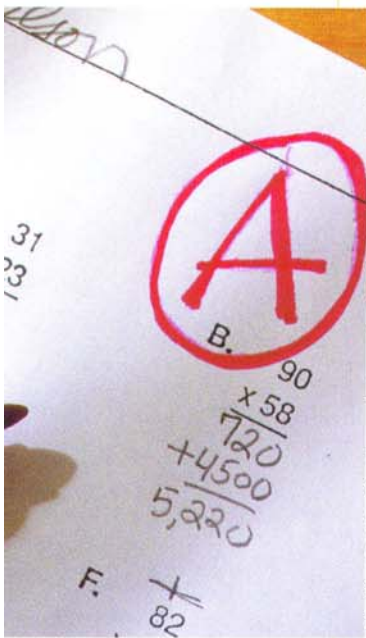
The third weakness of teacher-made tests is the overuse of easy and difficult questions. Tests are used to measure learning in relation to specific curricular content, not to satisfy the infamous bell curve. A test can be designed so that no one passes or that everyone makes an "A." A balance between the two extremes makes more sense. The difficulty level of a test affects the range of test scores. For example, a score of 85 on a difficult test is much more meaningful than a 95 on an easy test. This does not mean that a test with high scores is invalid. On the contrary, some tests are intentionally designed for students to make high scores, for example, a mastery review test.

What if the entire class does poorly on a test? Does this mean the students did not study? Or does it mean that the material tested was not adequately taught? Or perhaps, the selection of test questions or the way they were written contributed to the low scores? The "why" answer is not as simple as it may appear, but in most instances, when test scores are consistently low, the problem is with the teacher and not the students. In such instances, the test should be carefully reevaluated and given again.

Overemphasis on Rote Memory Questions

A fourth weakness of teacher-made tests is an overemphasis on rote memory questions. Teachers tend to overuse rote questions in the elementary and junior high grades and, in most instances, high school. Recall is an important component of testing, but its effectiveness is enhanced when balanced with other types of questions. The overuse of rote questions tends to produce students with underdeveloped thinking skills; consequently, students have difficulty expressing themselves because they are accustomed to producing memorized responses instead of thought-stimulating responses based on analysis and organizational skills.

If students cannot analyze or evaluate a problem, their test-taking critical skills are seriously limited. This causes extreme adjustment problems when teachers use subjective test items; it overwhelms students who are accustomed to a steady diet of rote memory questions year after year. Unfortunately, too many students are not



exposed to critical-thinking tests until college, and, even then, they may be few and far between. Christian schools must guard against the overuse of rote memory recall test questions.

Guidelines for Constructing and Administering Teacher-Made Tests

Time, effort, and planning are required in the construction of quality test questions. The teacher decides what course objectives to test and what type of questions to use on the test. The prerequisite to writing good test questions is simple yet profound: Use test-construction procedures that produce quality test questions based on the course objectives emphasized in class discussions. The following guidelines, presented without discussion, will guide teachers in constructing quality teacher-made tests:

1. Identify the instructional objectives to be tested.
2. Determine the type and number of test questions.
3. Use proper test-construction procedures.
4. Determine the point value of each test question.
5. Write draft test questions.
6. Write the final test draft three to five days before the test.
7. Make the testing environment as pleasant as possible.
8. Allow ample time for students to finish the test.

Ninety percent or more of the students should answer all of the test items, as well as having sufficient time to check their answers. If this guideline fails to hold true, the test is probably too long or too difficult, or the appropriate test time was not allotted. The number of general subject content areas on a test will also affect the test time. The normally recommended time is three to five minutes of test time for each major topic tested. Therefore, if 10 major topics are tested, the test time would average about 40 minutes.

The construction accuracy of test questions can be evaluated by discussing graded test papers in class. This gives the students an opportunity to talk about responses and to defend answers that differ from the answer key, assuming that such responses have merit. Understanding why students respond incorrectly to various test questions helps the teacher evaluate instruction as well as the quality of test questions. Making grade adjustments for poorly or incorrectly written questions is appropriate, even if it means invalidating certain test questions and adjusting the students' test scores accordingly.

Teacher-made tests serve a very practical and necessary function in the teaching-learning process. They are the most effective evaluative tools

available to teachers for measuring the achievement level of individual students and the class. They are designed by the teacher to measure what the teacher has taught; understanding how to construct and administer teacher-made tests is essential to this process.

David Payne, author of *Measuring and Evaluating Educational Outcomes*, states that the five prerequisites for writing good test items include the following:

1. A rational philosophy of education.
2. A command of verbal and written communication skills.
3. A command of the subject matter.
4. A command of item-writing techniques.
5. A knowledge of how students learn and develop.

These prerequisites are common to all types of tests, whether true/false or essay, teacher-made or publisher-made, achievement, or aptitude.

Summary

Teachers utilize three basic types of tests—teacher-made tests, publisher tests, and standardized tests. The most popular and most used are teacher-made tests. Teacher-made tests are popular because the teacher controls the subject content tested, they are responsive to small variations in knowledge, they are inexpensive, they are relatively easy to prepare and grade, they are easily filed for future use, and, most important, they allow teachers to determine the specific instructional objectives to be tested. With all the advantages of teacher-made tests, disadvantages also exist, but the disadvantages do not invalidate the value of teacher-made tests. If teachers follow the general guidelines for constructing and administering teacher-made tests, the disadvantages are all but eliminated.

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—Editor

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