

FASTBACK

291

Preparing Students for Taking Tests

Richard L. Antes

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Preparing Students for Taking Tests

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Preparing Students for Taking Tests

by
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The chapter sponsors this fastback as a memorial to the late Woodrow "Woody" Hickman, who had a distinguished career as a school administrator, a Boy Scout executive, and a Kappan. He gave willingly of his time and talents to be an educator of the highest order.

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Introduction

The role of standardized testing and other forms of testing in schools continues to be a topic of debate. (See fastback 92 *The Abuses of Standardized Testing*, by Vito Perrone, and fastback 93 *The Uses of Standardized Testing*, by Robert L. Ebel.) The debate will continue, but the reality of the matter is that standardized testing is here to stay for both pedagogical and political reasons. We live in a time when the quest for accountability seems insatiable. Students are taking more and more tests for a variety of purposes. They need and deserve help with taking tests.

Students enter a testing situation with varying levels of test-taking skills. Some students may not have the reading or listening skills to understand and follow directions when a test is administered. Other students may approach a testing situation with such anxiety that they cannot give their optimal performance. When students learn test-taking skills, their performance on standardized and teacher-made tests should be more in line with their true achievement, thus making test scores more reliable. Also, knowing what to expect in test situations reduces student anxiety about taking tests. They can approach a testing situation with a sense of confidence.

Students should be prepared for taking tests beginning in elementary school and continuing through all the grades at increasing levels of sophistication. Principals and counselors can help teachers in planning and implementing a test-taking skills program in the classroom.

In conjunction with the test-taking skills program, teachers should also learn how to construct high quality teacher-made tests and use good testing practices.

In this fastback, I will present suggestions for teachers on test-taking strategies, tips for students on how they can perform better on standardized tests, and ways to help students overcome test anxiety. The times call for making students test-wise. This fastback is intended for both preservice and inservice teachers as well as for parents.

Helping Students with Standardized Testing

In this fastback I focus primarily on standardized tests. It is important to note that good academic and psychological preparation for taking teacher-made classroom tests in the ongoing curriculum is applicable to standardized testing. And the information and tips I shall offer on standardized testing are also pertinent to taking teacher-made tests.

The teacher can play many roles to facilitate optimal student performance on tests. First and fundamental is planning and executing quality learning activities, which provide the content and skills that are later tested in the classroom. Second is giving students a psychological readiness for taking tests. These two roles are carried out during the regular classroom routine and span the academic year. Two additional roles are providing for optimal physical conditions prior to and during testing and administering the test in a manner conducive to maximizing student performance. Attention to each of these roles should help to make testing reflect students' true achievement.

Today it is common practice in school systems throughout the nation to assess student competency in basic skills (and indirectly to assess the instructional program) through the use of standardized tests. More than 33 states have legislated competency assessment programs. Typically competency tests are administered at several points during a student's years in school at the primary, elementary, junior, and senior high school levels. One state even has mandated a cut-off score

on the *California Achievement Test* as a criterion for kindergartners to be promoted to first grade!

Regardless of how teachers may feel about the use or abuse of standardized testing, they need to know how these tests are developed, how test items are written, how norms are established, and how test scores should be interpreted. With this information in hand, teachers can then begin to develop test-taking strategies for their students.

How Standardized Tests Are Developed

The content and skills in a standardized test are based on an analysis of widely used textbooks, state curriculum guides, and courses of study from representative classrooms. The test publisher's staff of test-item writers and a committee of curriculum specialists and classroom teachers develop a table of specifications for the test based on the content and skills to be measured.

Test items are written and administered to a representative sample of students. The test items then are critiqued using accepted criteria for item construction. Many are revised; some are discarded. When the final form(s) of the tests are completed, test manuals and administration booklets are written. The manuals contain technical information relating to reliability, validity, item selection procedures, standardization, norm development, and other relevant data. National or state norms are calculated based on scores of a representative sample of students. These norms are used to compare an individual's score to scores of other individuals or groups who took the test under the same standardized conditions.

Selecting Tests to Match the Curriculum

If standardized tests are used to measure student achievement and to assess the instructional program, then the content and skills tested should be the content and skills taught. Therefore, a school system must exercise great care in selecting the battery of standardized tests it will use.

Test selection should involve classroom teachers familiar with the instructional program. Teachers at each grade level should review the test carefully to see if there is a match between the content and skills taught in their school and the actual test items. In this way, teachers can determine if the test is valid for their particular school. By reviewing the test manual, teachers also can determine whether the norms established for the test are appropriate for their particular school. A useful reference for teachers involved in test selection is *Standards for Educational and Psychological Testing* (American Psychological Association, 1985). This publication covers the standards used by test publishers and offers other helpful information for potential test users.

Even though a committee composed of only a few teachers may be involved in the actual test selection, all teachers should review whatever standardized tests are administered in their classrooms to determine the match between the curriculum taught and the items in the test. In this way, teachers can make sure they are providing their students with appropriate content and skills prior to their taking the test.

Preparing students for a test does not mean drilling them on the exact items on the test. This is unethical and results in misleading data regarding student achievement and curriculum effectiveness. Norms established to compare achievement with students of similar age and grade are meaningless when specific items have been taught.

The author is aware of a first-grade teacher who sent parents a word list containing all the more difficult words from a reading test several weeks prior to testing, asking them to help their children memorize these words. Not surprisingly, the children in this teacher's class scored higher than other first-graders in the school. While the scores for this class were higher, did they really reflect true achievement and could they be used to make valid judgments about the progress of these children? In this writer's opinion, it is completely appropriate for the teacher to help improve student test performance by covering the kinds of skills and content found in the test as part of the regular curriculum but not by teaching specific items from a test.

Building Test-Taking Skills

The experience of taking tests provides students with some general test-taking strategies, which help them score higher on standardized as well as teacher-made tests. For some students these strategies develop incidentally with no special input from the teacher. However, not all students are capable of generalizing experiences from one test situation to another. To ensure that all students have an equal opportunity to demonstrate their true achievement on standardized or teacher-made tests, teachers should make a deliberate effort to help all students become aware of and gain practice in those test-taking skills that good test-takers use. The value of deliberate efforts to teach students test-taking skills is supported by research (Callenbach 1973; Brown 1982; McPhail 1981; and Frederickson 1984).

Throughout the school year, teachers can develop some of their classroom tests or worksheets in a format similar to that used in standardized tests. Then by discussing why certain responses are correct or incorrect, students have some familiar models to refer to when it comes time to take a standardized test. Also, commercial materials are available, particularly in reading and math, which provide practice in the test formats used on standardized tests. When these activities have been a part of the classroom program throughout the year, only a small amount of reinforcement is necessary in the periods just prior to standardized testing.

In the weeks just prior to the testing period, the teacher can administer commercially prepared practice tests. Many test publishers

provide practice tests to go with their standardized tests. By using these practice tests, students become familiar with the item format; and the teacher can point out key words in the test items and the thought processes required to make the correct response. Also, teachers can give tips on recording responses on separate answer sheets used with many standardized tests.

Following are some tips for students when taking a practice test:

1. Mechanics of test-taking and time management

- Go to the restroom prior to the testing session.
- Bring a sharp No. 2 pencil to the test session.
- Be sure you understand the directions before the test begins.
- Ask any questions you have after the directions are given and sample questions are completed.
- Note the time allowed for each section of the test.
- Keep track of the time and pace yourself.
- When time is limited, respond to the easy items first, so you can spend more time on the more difficult items.
- Make a check mark on any item you plan to skip and return to later.
- Use any remaining time to double-check your work.
- Use all the time allowed. Take a chance on all items.

2. Marking responses on separate answer sheets

- Mark responses with a No. 2 pencil, taking care to stay within the oval or circle.
- Completely erase any response you decide to change.
- Check the number on the answer sheet to make sure it corresponds with the number in the test booklet.
- When the answer sheet has several columns, slide it under the test booklet to cover the columns already used.
- If right-handed, place the test booklet folded to the correct page on the left and the answer sheet to the right. If left-handed, reverse the positions.

A teacher should not try to cover all the above tips in a single practice session. Spread them out over several sessions and then review them just prior to administering the actual test.

Developing Teacher-Made Practice Tests

In constructing practice exercises, a teacher should look at the standardized test items, especially the stems, and ask the following questions:

1. What test-taking skills are involved in these tests?
2. Are the test-item formats familiar to the students?
3. How might the formatting be confusing to the students?
4. What key words appear in the item stems?
5. Are these key words understood by the students?

The teacher can then construct practice test items to: 1) familiarize students with test-taking skills that have not been previously taught, 2) provide practice with items in different formats, and 3) ensure that key words are understood. For example, if the skill of multiple meanings of words is not one that has been given much attention during the year, the teacher might construct some items to reteach and test that skill. The format of these items should correspond to the format of the standardized test items.

The following two items are representative of those found on standardized tests. Each deals with the same skill (multiple meanings) but is formatted in different ways.

Example A

Directions: Find the sentence in which the underlined word has the meaning of bat as an animal.

Buy a new bat and ball.

Watch the bat flying overhead.

Bring him up to bat.

Example B

Directions: Find the word that means both a wooden stick and an animal.

- limb
- bush
- bat
- dog

In Example A the student has to read three sentences to find the one in which the word *bat* is used to mean an animal. In Example B the student must find one word that fits two meanings. This second type of item is more confusing because of the way it is formatted. The student may choose *dog* as a response because it fits the definition of an animal but does not fit the first definition, wooden stick. It is possible for a student to be confused by the format and give the incorrect response, even though knowing the multiple meanings of the word *bat*.

Teachers administering a standardized test with items like Example B will undoubtedly want to construct some practice test items and classroom exercises using this format and to practice multiple meanings prior to giving the standardized test. On the other hand, Example A may be similar enough to classroom exercises used to teach multiple meanings throughout the year that further practice with this skill is unnecessary.

Below is another set of items from standardized tests for testing spelling. Note that the the spelling word in each example is *thought*, but the items are formatted in four different ways.

Example C

Directions: Select the word that is spelled correctly.

- thaught
- thoght
- thot
- thought

Example D

Directions: Indicate if the underlined word is correct.

He thoht the work was done. Right Wrong

Example E

Directions: Fill in the blank with the correct word from those listed below.

We _____ the door was closed.

thot

taught

that

thought

Example F

Directions: Indicate which word below, if any, is spelled incorrectly.

hidden

shipped

counting

thoght

(no mistakes)

In reviewing these types of items, the teacher should ask if any of the formats might be confusing to students. Example C seems to be straightforward. Students are looking for a correctly spelled word that they might have been seen before. In Examples D and E, students might be confused if there are words in the sentence they cannot read. A tip for students is tell them to look at the underlined word in Example D or the choice of words in Example E to see if it is a word they have seen before or if it makes sense in the sentence. Example F is different because its format requires editing skills as much as spelling skills. The student must look at four words to see if any of them is spelled incorrectly. Again, a tip is to ask students if there is a word on the list they have never seen before. By providing students with practice with a variety of formats and giving them tips

on how to approach the different formats, teachers are developing test-taking skills that can be put to use when taking standardized tests.

After dealing with the variety of test-item formatting, the teacher should examine the key words in item stems. Key words are a critical component of most test items. Students must be aware of the importance of key words, and the teacher must make sure students understand their meaning.

At the primary level students should be able to read and understand such key words as: *who, what, when, where, how, mostly, probably, means*, and so on. These key words occur frequently on standardized tests. For example, with an item using the key word *probably*, the student cannot just skim the text to find the correct response. Rather, it requires the student to use some judgment based on what is read in order to make the correct response. The key words *mostly* and *mainly* in the item stem usually indicate that a main idea is sought. To answer a main idea item requires that students make inferences, because the main idea is not stated explicitly in the text.

Key words will vary depending on the grade level of the test, the purpose of the test, and the subject matter covered in the test. Some representative key words are listed below by categories.

Generic Key Words

of the following	possible	imply
maximum	means	story
probably	most likely	infer
minimum	shows	one may conclude

Main Idea Key Words

good name for story	mostly about
mainly about	good title for story

Sequence Key Words

first	after	next
before	last	in order
second	following	

Key words should be stressed throughout the year during regular lessons and written exercises, not just as a preparation for taking tests. However, if the teacher feels certain key words appearing in the items have not been covered or are not adequately understood, they should be included on practice test exercises or worksheets prior to testing. Feedback from student performance on practice test exercises can be used to modify instructional strategies in the ongoing curriculum.

Multiple-Choice Test Items

Since most standardized tests and many other kinds of tests use multiple-choice items, students should receive direct instruction in how to select the correct response from the alternatives offered. There are some general rules for selecting correct responses, which can be taught as appropriate situations arise during the school year and during practice test sessions. By encouraging students to discuss how they made their choices, they will arrive at some generalizations they can apply in a real test situation. Following are some general guidelines for selecting correct responses in multiple-choice test items:

1. Focus on the stem of the test item. Read the stem carefully to see what information is sought. In a well-written test item, a definite task is set in the stem. Read the stem without looking at the response choices. Decide what you think is a correct response to the item. Then check to see which response agrees with that decision.
2. Reread any item that is not understood. It may be necessary to read the stem several times to understand it.
3. Read all responses before making a final choice. This will help to avoid choosing a response that may be partly correct but is not the best response.
4. When you do not know the correct response, compare each with the stem and analyze how each is different. One response may have something that others do not. Through this process, attempt to eliminate incorrect responses. As responses are eliminated, the chance of selecting the correct response increases. With five choices, the

chance of selecting correctly by guessing is 20%, with four choices 25%, and with three choices 33%. If all but two alternatives are eliminated, the chance of selecting correctly is 50%. Thus by eliminating incorrect responses, the chance of selecting the correct response increases.

5. Compare each response with the stem and ask what makes one response correct and the others incorrect.

6. When two responses are opposite, one may be eliminated. Although the other opposite may not be the correct response, the chances of selecting the correct response are improved.

7. Once you determine that a response is incorrect, do not think about it again.

8. Of the responses still remaining, select the most inclusive response (that is, the response that includes one or more of the others) as an option.

9. Be alert for clues in stems of other items, which may help you select a response in an item you are having trouble with.

10. After logically eliminating as many responses as possible, take a guess even if only one or two responses can be eliminated.

11. If no response can be eliminated, do not guess immediately. Skip the item, put a check mark by it, and go ahead with the rest of the test. Then return to it. Sometimes the correct response will occur to you while thinking of something else. By going on, you don't waste time, and you don't become frustrated over one item.

Developing Test-Wisness

Being familiar with the various test-item formats, understanding the importance of key words, giving careful attention to directions, and knowing how to negotiate multiple-choice test items are all aspects of what is called test-wisness. Students who have these test-taking skills are test-wise.

The down side of test-wisness is the ability to detect clues in an item that helps students to select the correct response without neces-

sarily knowing the content. Such clues are not intentional but rather reflect the ineptness of the test-item writer. Such clues are not likely to be found in standardized tests, because they are written by experts in test-item construction. However, such clues often are found in hastily constructed teacher-made tests. Although the author believes students should be made aware of these clues, he feels it is more important that teachers learn to avoid such clues when constructing test items.

Below are some clues students can look for in multiple-choice items. These same clues are what teachers should avoid when constructing multiple-choice items.

1. If a response does not have a parallel structure with the item stem or does not make sense grammatically, then the response is likely to be incorrect.
2. If the word "none" or "all" is used in a response, it is usually incorrect.
3. If the word "some" or "often" is used in a response, it is likely to be correct.
4. If "all of the above" is a response, look to see if two of the other responses seem appropriate before selecting "all of the above."
5. If the correct response for many items on the test tends to be longer, select the longer response on items about which you are unsure.
6. If one response is more precise or technical, it is more likely to be correct.

The reader can find additional guidelines for writing multiple-choice items in *Classroom Testing: Construction*, 2nd Edition, by Charles D. Hopkins and Richard L. Antes (F.E. Peacock Publishers, 1989).

In concluding this discussion on building students' test-taking skills, it is important to note that it is highly unethical to use actual items from standardized tests for practice purposes. For example, a practice test on map reading skills should use a different map and differ-

ent questions. The practice exercise can test the same skills, but it should not use the exact same items as appear in a standardized test that a school system has purchased for its evaluation program.

An Appropriate Physical Environment for Testing

The physical environment in which testing is conducted can make a difference in student performance. Whenever possible, tests should be given in the classroom where students regularly meet, because they feel more comfortable in familiar surroundings. The younger the students, the more disconcerting it is to be moved to an unfamiliar place for taking a test. If it becomes necessary to move to another room, check for possible noise distractions.

The test room should be adequately heated and lighted, well ventilated, and quiet. Desks or tables should provide adequate space for an open test booklet, response sheet, and any other supplies needed. Students should be able to sit comfortably with their feet flat on the floor. Seating should be arranged to discourage cheating. When desks or tables cannot be separated easily, caution students to keep their eyes on their own work and provide adequate supervision.

The testing place should be free of distracting noises such as children playing at recess, passing to lunch, or band practice. Avoid scheduling tests at a time that conflicts with important school events. Notify the office and colleagues that the class should not be disturbed except for an emergency. Place a "TESTING IN PROGRESS" sign on the classroom door.

Conducting the Testing Session

Standardized test manuals provide explicit directions for administering the test. Follow these directions precisely. Carefully read through the manual and test items. One way to ensure familiarity with the test is to actually take the test prior to administering it to students. Although it is preferable to have the students' regular classroom teacher administer the test, any responsible adult who has studied the manual and reviewed the test can administer it and serve as a proctor.

If proctors administer the test in a large group setting, there should be one proctor per 30 students. However, younger students will need closer supervision. If the test manual makes recommendations about the size of the group and the number of proctors needed, these recommendations should be observed.

Proctors should be familiar with the test manual and should receive careful instructions for the distribution and collection of test materials. Each proctor should be assigned a section of the room or a specific number of students to monitor. During testing, proctors should move about their assigned sections of the room to make sure that students are recording their responses on the answer sheets in the proper manner. Proctors should keep talking to a minimum to avoid distracting students. Student questions should be answered prior to beginning each section of the test.

When administering a battery of tests requiring more than one session, test materials must be collected and redistributed. To expedite this process when testing a large group of students, follow these steps:

1. Distribute the test booklets and answer sheets at the start of each session.
2. At the end of each session (except the last one), have students insert their answer sheets into the test booklets with their names visible. Collect all booklets in a pre-arranged order.
3. Remind students to take the same seats when they return for the next testing session.

4. At the beginning of the next period, redistribute the test booklets in reverse order in which they were collected. Have students check the test booklets to make sure that they contain their own answer sheet.

Most standardized tests are timed with specified time allotments for each subsection of the test (for young children, tests may have open-ended time limits). Some students may finish before the specified time, but the full allotted time should be given even if only two or three students are still working. Suggest to students who finish early that they go back over their responses. Students should not leave their seats since this may be distracting to those still working on the test.

The test manual usually specifies the time limits and the time allotted for each subtest. They must be strictly observed. Often the manual has a form on which to record starting time, test time, and stopping time. If not, write out the time allotments for each section of the test and record the starting and stopping time. Keep this information handy when administering the test. Announce to the students when five minutes remain before they must stop working.

Teacher Checklist for Conducting the Testing Session

1. Distribution of materials

- _____ Assemble materials.
- _____ Have a plan for distributing and collecting test materials.
- _____ Make sure students have two No. 2 pencils and an eraser.
- _____ Distribute place markers to young children to help them keep their places in the test booklet.

2. Proctors

- _____ Determine number of proctors needed based on size and age level of group.
- _____ Have proctors read the test manual.
- _____ Be sure that proctors are familiar with the procedure for distribution and collection of testing materials.

- _____ Remind proctors to check to see that each student is recording responses properly on the answer sheet.
- _____ Explain to students what the role of the proctor is.
- _____ Remind proctors to be cheerful, supportive, and quiet during testing.

3. Timing tests

- _____ Observe time limits precisely.
- _____ Have a stop watch or other time-piece with sweep second hand available.
- _____ Write out the time allocations for administering the subtests and total test.

4. Scheduling tests

- _____ Space sessions for administering a battery of tests over several days to avoid student fatigue.
- _____ Schedule the days of testing and time of day.
- _____ Avoid administering tests immediately prior to and after vacations.
- _____ Administer tests on Tuesday, Wednesday, or Thursday if possible.
- _____ Avoid testing immediately following strenuous physical activity.
- _____ Avoid scheduling tests so that students miss recess or other activities they enjoy.

5. Test directions

- _____ Follow instructions in the test manual precisely.
- _____ Emphasize to students the importance of following directions.
- _____ Provide students practice in following directions and responding to sample items.
- _____ Have students practice completing the name identification section of the answer sheet or test booklet (very young students may require the teacher's help in doing this).
- _____ Remind students to ask any questions when the directions are given because no assistance will be available after the test starts.

Preparing for Taking Tests

There are many things a teacher can do to help students prepare to take tests. These include academic preparation, emotional preparation, and developing test-wiseness. Building on what has been presented earlier on providing practice in taking tests and arranging for optimal physical conditions for taking tests, let us now turn to other aspects of preparation.

Getting Ready Academically

By the time students reach high school age, it is common for them to postpone preparing for a unit or semester test until the night before. They pore over their class notes and try to cover textbook material they have neglected to read. They come to the testing situation tired and tense. There is a difference between reviewing for a test on material that has already been assimilated and "cramming" for a test by trying to learn large amounts of new material over a short period. Reviewing can help to improve test scores, but "cramming" is usually counterproductive.

With standardized tests, cramming serves little purpose. An evening (or even three or four) of intensive study before a standardized test will not improve test performance. The content and skills tested in a standardized test are acquired over a considerable time span. Students should come to a standardized test rested and relaxed.

Emphasize to students that preparation for any test, but especially for standardized tests, requires systematic study throughout the school year. Being academically prepared is ultimately the responsibility of the individual; but it also involves the teacher, who must provide the appropriate content and skills, and the parents, who must encourage their children to do their best and assist them when they need help.

Following are some suggestions for students on how to get ready academically for tests:

1. Begin to study immediately following instruction.
2. Study every day at a regular time.
3. Overstudy. Once you feel you have learned the material, spend approximately 25% more time with it.
4. Organize your study. Make outlines and notecards to refer to later when reviewing.
5. Review previous examinations and quizzes to see the kinds of concepts and skills that are required to answer the questions.
6. Review content in all areas periodically.

Getting Ready Emotionally

A student's history of academic performance determines the degree of self-confidence with which he or she approaches a testing situation. Lack of self-confidence can lead to test anxiety and have an adverse impact on test performance. Test anxiety, the state of being uneasy or apprehensive about a test, falls on a continuum. While a low level of anxiousness has been shown to improve test performance, a high level of anxiety can be thoroughly debilitating. When anxiety is extreme, test performance is not truly representative of the skills and knowledge an individual possesses. Fortunately, it is possible to reduce anxiety to a level where it does not seriously impair test performance.

The psychological make-up of some students may contribute to their anxiety regarding test-taking. Individuals sensitive to being judged

on any level may have a high fear of failure in test situations. Also, as students move through the grades, tests assume greater importance in their minds as well as in the minds of their parents. When students feel that so much is resting on test performance, anxiety is likely. Anxiety also results from a fear of the unknown. When students have no idea of what to expect from the testing situation, anxiety occurs.

Probably everyone has experienced test anxiety at some time. But there are several things a teacher can do to lessen student anxiety: 1) help students develop good self-concepts as learners; 2) foster positive attitudes in students toward tests and testing; 3) help students to develop effective test-taking skills; and 4) inform parents about their role in preparing the student for test-taking.

For students to feel self-confident as learners, they must experience many successes in the classroom. When students experience success, they do not approach tests with fear but as an opportunity to show what they know. Teaching effectively every day will prepare students academically and give them the self-confidence to approach the testing situation without anxiety.

Teachers should pay particular attention to the attitudes they convey about tests and testing. A standardized test should not be approached as a contest to see who does the best. It is to be expected that students' test scores on standardized tests will reflect a range of achievement levels. There is no need to make comparisons of student test scores in class except in a very general way. Students and teachers should understand that test results are used for planning the educational program.

Although it is appropriate for teachers to want students to do their best, they should avoid statements that might increase anxiety. Instead of saying, "Your test scores are very important to your future success, so try hard. I am depending on you," a teacher might say, "Work carefully and do the best you can." Too much stress on test results may cause students to view the test as a threat.

Good teacher-student rapport can reduce anxiety. When the teacher, through daily contact with students, has built a foundation of trust concerning all aspects of the testing process, the students know what to expect. They enter the testing situation with a sense of confidence, and the testing atmosphere is one that is conducive to students performing up to their potential. Other things a teacher can do to lessen test anxiety are: 1) offering positive statements to students about their capabilities, 2) reviewing test-taking skills, and 3) making a special effort to prepare students with low expectations because of past academic problems.

When administering standardized tests, be sure to inform students that no one is expected to get all the items correct or even to finish all the items on the test. Remind students that some items are designed to be difficult for all students. It is particularly important for elementary school students to understand this, because most of their classroom testing tends to be mastery-type tests, where they are expected to complete the test and answer all or almost all items correctly. Students at this level need to understand that classroom mastery tests serve a different purpose than standardized tests.

Following are some tips and advice to share with students regarding text anxiety:

1. Nearly everyone experiences some anxiety concerning test-taking. Concern about the test is normal.
2. A low level of anxiety in testing situations can be beneficial to test performance because it makes one alert. However, high anxiety can interfere with test performance.
3. Various techniques can help you to relax when feeling anxious, such as clenching your fists tightly, holding for a few seconds, and then letting go and allowing your body to go limp. Another technique is to take a deep breath and hold it for a count of 10, then let the breath out and allow your body to go limp.
4. Learn as much as you can about the details of the test by asking questions several days prior to the test.

5. Get a minimum of eight hours sleep the night before a test.
6. Do not skip any meal on the day a test will be administered, but avoid overeating because it may cause drowsiness and sluggishness.
7. Make sure you allow plenty of time to get to school or the testing place.
8. Avoid emotional situations that may be upsetting. Talk about pleasant things and avoid discussion related to test content or test performance.

The Case for Test-Taking Skill Programs

Because testing plays such a major role in education today, this author strongly believes that schools have an obligation to prepare students for taking tests. He further believes that schools should have an organized K-to-12 program of test-taking skills that is age appropriate for students' developmental level. To develop such a program will require the cooperative effort of teachers at various grade levels. This final chapter offers a plan for developing a testing-skills program.

Test-taking skills may be taught formally or informally; but in either case, they must be planned. Formal programs such as the one described by Brown (1982) call for weekly 30-minute sessions for five to seven weeks. Hill and Wigfield (1984) suggest a five-hour, 10-session program. Equally effective are informal programs integrated into regular classroom instruction. The advantage of this approach is that it conveys to students that testing is a normal part of instruction and not a separate entity divorced from the classroom.

Whether using a formal or informal approach, the program should be carefully planned to ensure that appropriate topics are covered and not left to chance. In addition to the program itself, teachers need to give special attention to those students with academic deficiencies, with poor self-concept, or with high test anxiety. Dealing with these kinds of problems is long-term and ongoing and frequently will require the involvement of parents and counselors.

Following is an outline of areas to be covered in a testing-skills program.

- I. Discussion of the purposes of testing
 - A. Types of tests
 - B. Differences and similarities between standardized tests and classroom tests
- II. Mechanics of taking tests
 - A. Listening to or reading directions
 - B. Directed practice in following directions
 - C. Asking questions before testing begins
 - D. Practice in recording responses on separate machine-scorable answer sheets
- III. Developing strategies for various types of items
 - A. Reviewing and providing practice with different item formats.
 - B. Reviewing key words used in items
 - C. Reviewing major concepts covered in tests and providing practice in different kinds of items used to test understanding of those concepts.
 - D. Providing practice in the techniques for eliminating responses in multiple-choice items
- IV. Practice in synthesizing the main idea from a paragraph
- V. Practice in making inferences from the facts provided
- VI. Discussion of test anxiety and ways of overcoming it.

For additional information on developing a testing-skills program, the reader is referred to the following books and journal articles. Brief annotations are provided.

Books

Alford, Robert L. *Tips on Testing: Strategies for Test-Taking*. Washington, D.C.: University Press of America, 1979.

Presents information on test-taking skills, relaxation, and sample test items from several types of tests, for example, the *Iowa Silent Reading*

Test and the California Language Test. Also includes a survey of study habits and attitudes.

Divine, James H., and Kylen, David W. *How to Beat Test Anxiety and Score Higher on the SAT and All Other Exams.* New York: Barron's Educational Services, 1982.

Presents general information on strategies for taking Scholastic Aptitude Tests. Also includes sections on test-taking, study habits, and how to beat test anxiety.

Erwin, Bette, and Dinwiddie, Elza Teresa. *Test Without Trauma: How to Overcome Test Anxiety and Score Higher on Every Test.* New York: Grosset and Dunlap, 1983.

Discusses test anxiety and presents a program for overcoming it. The program identifies components of test anxiety in individuals and shows how to change it to a more positive approach.

Flippo, Rona F. *Test Wise: Strategies for Success in Taking Tests.* Belmont, Calif.: David S. Lake, 1988.

Presents information on how to be test-wise and how to use test-taking skills to be better prepared and feel more confident. Discusses preparing for essay tests and objective tests and using clues in test-taking.

Orr, Fred. *Test Taking Power.* New York: Monarch, 1986.

Deals with 13 concerns about test-taking in a variety of settings. Provides information on how to relax, use time efficiently, think positively, and perform well in test situations.

Sarason, Irwin G., ed. *Test Anxiety: Theory, Research, and Applications.* Hillsdale, N.J.: Lawrence Erlbaum Associates, 1980.

A source book dealing with research, theory, and applications concerning test anxiety.

Sherman, Thomas M., and Wildman, Terry M. *Proven Strategies for Successful Test Taking.* Columbus, Ohio: Charles E. Merrill, 1982.

Presents information on preparing for tests, becoming an aggressive test-taker, and maximizing test scores. One chapter each on multiple-choice, essay, true-false, and open-book tests provides detailed information and suggestions for performing well on each type of test item.

Journal Articles

Brown, Duane. "Increasing Test-Wiseness in Children." *Elementary School Guidance and Counseling* 16, no. 3 (1982): 180-86.

Outlines a test-taking program that prepares students to decipher instructions, navigate complex test booklets, and respond to test questions so that test scores are more valid indicators of ability and achievement.

Callenbach, Carl. "The Effects of Instruction and Practice in Content-Independent Test-Taking Techniques upon the Standardized Reading Test Scores of Selected Second-Grade Students." *Journal of Educational Measurement* 10, no. 1 (1973): 25-29.

The author concludes that test-naive, second-grade students' standardized reading test scores can be raised significantly through instruction and practice in content-independent, test-taking techniques. Instruction and practice in test-taking has an effect on performance.

Cook, Donald H. "How to Raise Students' Standardized Test Scores: From A to Z." *Contemporary Education* 58, no. 4 (1987): 216-19.

Provides direction and suggestions for increasing student performance on standardized tests.

Fluitt, John L., and Gifford, Charles S. "Who's Teaching Teachers How to Teach Test-Wiseness?" *Contemporary Education* 51, no. 3 (1980): 152-54.

Presents a rationale for teaching test-taking skills as a part of preservice and inservice teacher education.

Frederickson, Les. "Teaching Test-Taking Skills." *Social Studies Review* 23, no. 2 (1984): 23-28.

Argues that test-taking skills can be taught using four strategies: 1) physical, emotional, and intellectual preparation; 2) time-use strategies; 3) error-avoidance strategies; and 4) guessing strategies.

Hembree, Ray. "Correlates, Causes, Effects, and Treatment of Test Anxiety." *Review of Educational Research* 58, no. 1 (1988): 47-77.

Provides a meta-analysis of 562 studies on the nature, effects, and treatment of academic test anxiety.

Hill, Kennedy T., and Wigfield, Allan. "Test Anxiety: A Major Educational Problem and What Can Be Done About It." *The Elementary School Journal* 85, no. 1 (1984): 105-26.

Discusses what test anxiety is, what effect it has, and what can be done about it. Provides examples of test-taking skills and motivational dispositions and outlines a 10-session classroom testing-skills program.

McPhail, Irving P. "Why Teach Test Wiseness?" *Journal of Reading* 25, no. 1 (1981): 32-38.

Raises three questions regarding test-wiseness: What are the skills? Can they be effectively taught? How should they be taught? Test-taking skills develop test-wiseness and also may help develop critical thinking skills, especially analytical problem solving.

Parrish, Berta W. "A Test to Test Test-Wiseness." *Journal of Reading* 25, no. 17 (1982): 672-75.

Presents a test on study skills that incorporates the test-taking skills found to be most useful.

Phillips, Art. "Test Taking Skills for Primary Grades: A SORD Project." Medford, Ore.: Jackson Education Service District, 1983. ERIC Document Reproduction Service No. ED 237 581

Gives suggestions for improving test-taking skills of primary school students.

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