

Team Testing for Individual Success

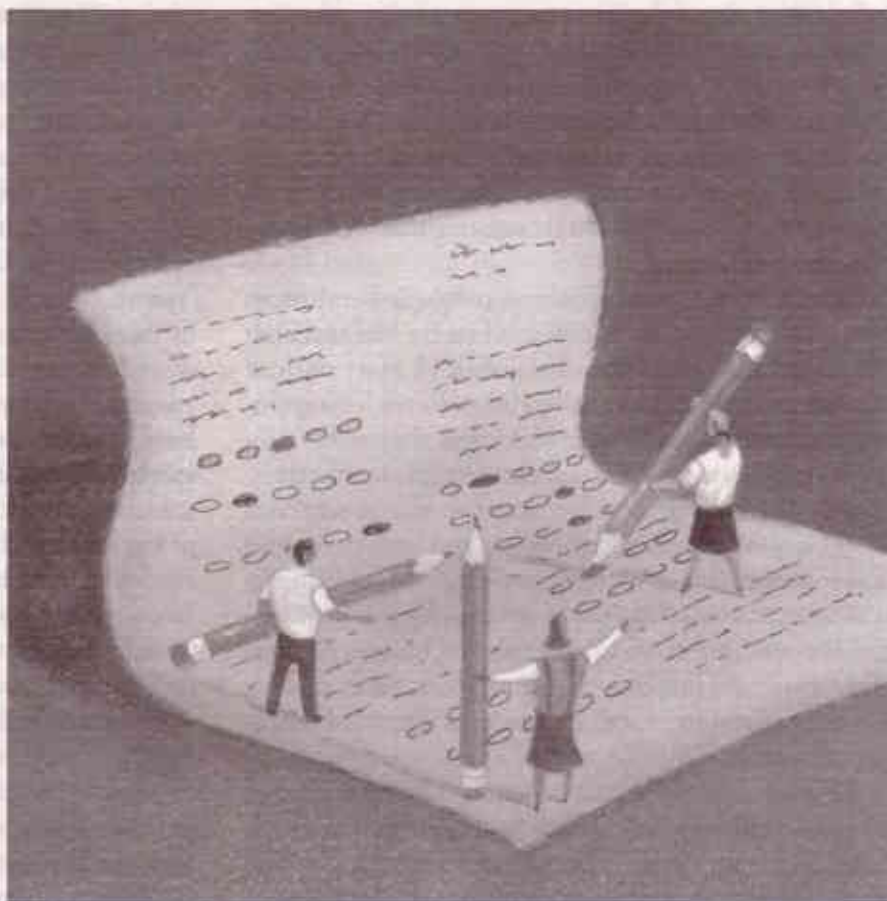
Why do creative teachers who want to help all their students learn in meaningful ways have to use high-pressure testing methods that work against that goal? The authors propose a system of testing that serves the need for evaluation while contributing to students' intellectual and social growth.

BY B. LEE HURREN, MATT RUTLEDGE, AND AMANDA BURCHAM GARVIN

TESTING IS an all-purpose tool in today's school systems, with students frequently being evaluated for grades, advancement, graduation, and college entrance and exit. Because so much of this testing is a game played for high stakes, many students of all ages and ability levels have developed extremely high levels of test anxiety.

Teachers use an array of strategies to address the needs of diverse learners and so improve student learning. Why then, don't we use similar methods and strategies when assessing student progress? Wouldn't it seem sensible to test in a fashion similar to the way students have practiced and learned? Yet even as teachers try to teach students in creative, mean-

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ingful ways and help them develop a desire for lifelong learning, high-stakes testing is acting in opposition to, even inadvertently defeating, these efforts. We believe that learning can and should be enjoyable, exploratory, meaningful, long-lasting, and filled with discovery. And we also believe that testing can be a part of that experience.

Various studies have shown that students who score high on measures of test anxiety will score lower on tests than students whose anxiety scores are lower.¹ More specifically, test anxiety is one of the variables most commonly associated with student underachievement and so poses serious problems for students at all academic levels.² Other research has concluded that subjects who are highly anxious when under evaluative stress not only perform at lower levels, but also spend less time on academic tasks.³

Moreover, highly test-anxious students who do poorly on traditional tests perform at a level similar to their peers on other tasks.⁴ This refutes the idea that students use test anxiety as an excuse for their failure to study or for poor study habits.

Some people are just not good at taking traditional tests. Some students feel more comfortable expressing information through discussion, presentation, demonstration, and other creative means. We believe that an easy approach to reducing test anxiety would be to use a variety of testing techniques. We do not advocate the removal of traditional testing methods from schools. Instead, we favor of the use of additional evaluation methods that make use of various classroom activities, strategies, and procedures.

For Matt, the idea of team testing grew out of an observation he made in 2003, while he was teaching English classes for grades 5 through 8. Matt noticed that his students could readily discuss any given grammatical or mechanical idea, so long as they were "talking about" it or could speak their minds in the classroom. When students were asked to read a sentence aloud and locate its direct object, the majority could accomplish the task with relative ease. When students were asked to identify the characteristics that distinguish a concrete noun from an abstract noun, most of them could do that as well. However, as soon as written tests were distributed, the students' knowledge simply vanished.

This discrepancy between students' ability to discuss a topic knowledgeably and their inability to master a written test on the same topic was pervasive — and perplexing. On numerous occasions Matt discussed

test anxiety and study skills with his students. He also stressed that effort, not grades, was the key ingredient to success in his class. But the discrepancy persisted. Finally, while he was preparing to administer a test on sentence fragments, it dawned on him that the pivotal component of the discrepancy had to be language. During instructional times, students were allowed to talk. During testing, they were not. So Matt devised a plan whereby his classes could make orderly, authentic use of oral communication through "team testing."

Amanda was teaching high school English classes of approximately 20 students each. Their range of abilities was wide. Her students seemed to express intelligent solutions and demonstrate excellent retention of all material, as long as they were given a chance to verbalize their answers. However, when in the traditional testing atmosphere, the students seemed unable to recall such basic concepts as subject/verb agreement. Amanda was an avid user of cooperative-learning strategies in her teaching, so she began searching for a way to combine group-learning activities with testing, in order to help more of her students show what they had learned. That is when she heard about Matt's group-testing idea in a graduate class taught by Lee at the University of North Alabama.

In order to enable students to make use of talk during exams, Matt gave his classes the opportunity to take team tests. To help prevent some potential problems with such an approach, he outlined a detailed process by which the students would take the team test. He considered two key components (achievement level and "friend factor") before dividing the class into groups of three or four, optimal numbers for effective group work.⁵ Students who performed at higher levels were matched with students who tended to perform at lower levels. The justification is that the higher achievers could model their problem-solving processes for the under-achievers. In addition, it has been found that students of low ability achieve at higher levels when paired with students of high ability.⁶ With regard to the "friend factor," Matt separated students who appeared to share close relationships, so that the friendships would not interfere with the team-testing procedure.

Students within each group were given individual copies of the test and were assigned roles as "reader" or one of the "judges." At selected intervals throughout the test, the students changed roles. The reader read each test item aloud to his or her group and then posed the following question to one group member at a time,

"Do you think that this item is a fragment or a complete sentence? Why?" Each judge would then have an opportunity to vocalize his or her thoughts on the item in question. After soliciting responses from each judge, the reader, too, would then present his or her thoughts. If all members of the group agreed, they would then mark the item and move on to the next. If the group did not agree, the process was repeated once more, which allowed each member to restate his or her stance. After recycling the process, the students had two options: if they agreed, they would mark an appropriate response and move to the next item; if they still disagreed, each group member could mark what he or she felt to be the appropriate response, and the group would move on with the test.

The procedure seemed a little confusing, so Matt selected one group to model the process by completing the first two items of the test. We might even suggest a practice run for the entire class on the day before the test. While groups of students work together on the tests, the teacher must practice classroom with-it-ness by patrolling the room without making any comments. The teacher must pay close attention to what is being discussed, to the use of creativity and originality of ideas, and to just who is participating. The teacher should verify that all students are actively involved.

Amanda's procedures for group testing are similar to Matt's, though not identical. For one thing, Amanda pairs her students for testing. One student is the "patient" and reads the problem out loud. The other student is the "doctor" and diagnoses the problem. The students alternate roles on even and odd problems. After the "doctor" diagnoses the problem, the patient proclaims either "I concur" or "I do not concur because . . ." If no agreement can be reached, the students may choose to report different diagnoses, but they must explain why they did so on their own test papers. Any student found not following procedure will take an alternative assessment — alone.

We should note that both Matt and Amanda circulated throughout the classroom to ensure that proper procedures were being followed. Both teachers witnessed something quite extraordinary in their classes. Not only did the students adhere to the process, but they also seemed to enjoy it. The students were genuinely excited about the prospect of using such an approach, and that excitement translated into an unforeseen heightening of student motivation. Students who were normally frustrated and discouraged by a test were now seriously engaged in the testing process. Students



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were listening to one another, talking to their peers about test items, trying to decipher the correct answer, and debating why an answer was or was not the best response. Even an oft-frustrated dyslexic student had hope in his eyes. Students stayed on task, and all of them passed with atypically high scores. In fact, Amanda had administered the same test in the previous two years to similar groups of students under traditional testing circumstances. In 2002 the average score was 59.88%, and in 2003 it was 59.44%. However, in 2004, the group-testing approach yielded an average score of 79.70%.

We feel strongly that this particular testing method could be a source of great support and assistance to students of all ability levels. However, we should note that it could create some controversy. Therefore, we have compiled the following list of justifications for using the idea of team testing.

1. The team test enables students to use all facets of language. People retain knowledge best through a combination of expressive components.
2. The team test obligates students to use problem-solving skills and to learn from other students' skills. Those students who have weaknesses in a given area can take note of other students who are more proficient in that area.
3. The team test fosters a sense of community among students. Because the format requires students to cooperate with one another and to use group interaction skills, they grow more sensitive to their fellow students and to their ideas.
4. The team test obligates each student in the class-

room: every student must fulfill her or his role. Therefore, students assume more responsibility.

5. The team test removes the fear inspired by traditional testing. Negative feelings and test anxiety are quickly reduced.

6. The team test grants each student a voice in the decision-making process. In this sense, the procedure is democratic.

7. The team test generates a high level of student motivation. The approach opens unexplored avenues for students, especially those who are low achievers in traditional testing.

8. The team test creates a student-centered classroom.

9. In certain classes, teachers may find that group testing can also accommodate such time-consuming activities as individual oral exams or performances.

10. The team test validates the curriculum. When students are actively engaged, they view the curriculum as meaningful.

11. The team test develops critical thinking skills among students as they share their own ideas, listen to those of others, discuss best answers, and make decisions.

12. Learning will occur during the team test. Diane Elliot and her colleagues have reported that learning actually does take place during a structured group examination. Students acquire and strengthen skills and knowledge as they work together.

13. Finally, the students must demonstrate their knowledge of the subject matter.

However, we do not suggest that this method of assessment presents no causes for concern. Thus we offer a list of our reservations below, and we think teachers would do well to consider them before deciding to try out team testing.

1. The team test could be manipulated by students. Students might ignore the proper procedures and allow one student to complete all — or most — of the test.

2. The team test might breed dependence. Students who are consistently low achievers could come to rely too much on the team approach and so fail to develop any of their own resources for dealing with a traditional testing situation.

3. The team test might be overused by teachers. That is, instead of using the approach to diversify testing, teachers might designate team testing as their primary means of assessment.

4. The team test might be challenged by school ad-

ministrators, fellow teachers, the parents or guardians of students, or even by the students themselves.

As our list of reservations suggests, in order for this type of testing to be effective, the teacher must be acutely aware of what each individual and each group is doing. Some groups and individuals will need to be monitored more closely than others, but all can experience success through group testing.

Teachers who choose to employ this method of testing may come up with their own ways to evaluate their students' tests, but we offer the following suggestions for what constitutes a good group effort: appropriate discussion of the topic, appropriate answer for the question, effective cooperation among all group members, and sufficient discussion time on the topic.

When Lee taught high school and middle school Spanish classes, he often used group-testing activities one day and then a more traditional testing method the next day, combining the scores for one overall grade. Sometimes, he kept the grades separate. Most students respond very well to the combination, though, because it allows them to work and achieve in groups while they review and prepare for the test of their individual knowledge and understanding. The discussion and review of materials on the first day also relieves some stress on the following day. Students are better prepared for the individual testing not only because of the discussion and review that took place in a serious team-testing format but also because they were able to identify areas of deficiency in their own learning.

We should note that some students may experience minor discomfort when working in groups, especially in a testing situation. In our experience, the students most bothered are usually those with the highest grade-point averages. However, we have never encountered a case in which a high-achieving student's grade was jeopardized because of group testing. The students with higher grades tend to have a positive influence on others, and, rather than finding their own grades lowered, many have found great satisfaction in helping others understand what comes easily to them.

Teachers should expect some early disappointments when they first attempt innovative evaluations. It may take as many as a few trials before the students get comfortable and the ideas begin to flow. But if teachers give team testing a chance, it will change many students' attitudes about testing in a positive way. The first time that this strategy was attempted in each of our classrooms, we had to provide continuing encouragement to get students to actually discuss their answers together.

There was a feeling among the students that they were being set up in some way, that the whole idea was a trap. They seemed to expect that suddenly the teacher would shout, "Hey, this is a test. No talking." But soon they all began the process of team testing.

The vast majority of our students will ultimately find work in which they will interact with other people. In order to be successful in today's job market, our students need to develop their creativity, their flexibility, and their ability to work with others. Any student who finds it difficult to work in group situations will surely benefit from group testing. We strongly believe that this type of testing is more closely related to real-life situations than is any form of traditional testing. After all, how many times after graduation have you been forced to sit silently in rows, without fidgeting, in hard and uncomfortable chairs, while doing paperwork that seems trivial and boring yet will have serious ramifications for your future? Okay, besides your yearly teacher evaluation meeting with your principal.

Team testing is not meant to be more effective for every unit of every teacher's classes, but it does offer another tool with which teachers can judge their students' progress. We do not advocate neglecting memorization and the development of analytical abilities in the classroom; however, we do believe that a more balanced approach to testing, which can reach more students more often, is a more equitable approach.

After many group-testing activities, we have had numerous students comment that the test "wasn't that bad" or admit, "I kind of liked that test" or ask, "Why don't you give us more tests like that?" We have also noticed that more students have begun to show positive studying behaviors, which we attribute to their desire to support the group's performance and to ensure a positive evaluation for themselves. Above all, group testing will help reduce the level of test anxiety even as it fosters student creativity and critical thinking.

1. Rosemarie Stallworth-Clark et al., "Test Anxiety and Performance on Reading Competency Tests," *Research and Teaching in Developmental Education*, vol. 17, 2000, pp. 39-47; Menucha Birenbaum and Fadia Nasser, "On the Relationship Between Test Anxiety and Test Performance," *Measurement and Evaluation in Counseling and Development*, vol. 27, 1994, pp. 293-301; Jennifer L. Horn and Stephen J. Dollinger, "Effects of Test Anxiety, Tests, and Sleep on Children's Performance," *Journal of School Psychology*, vol. 27, 1989, pp. 373-82; and Myron Boor, "Test Anxiety and Classroom Examination Performance: A Reply to Daniels and Hewitt," *Journal of Clinical Psychology*, vol. 36, 1980, pp. 177-79.

2. Birenbaum and Nasser, op. cit.

3. Frank V. Guida, Larry H. Ludlow, and Mark Wilson, "The Mediating Effect of Time-On-Task on the Academic Anxiety Achievement Inter-

action: A Structural Model," *Journal of Research and Development in Education*, Fall 1985, pp. 21-26.

4. Horn and Dollinger, op. cit.

5. Yiping Lou et al., "Within-Class Grouping: A Meta-Analysis," *Review of Educational Research*, vol. 66, 1996, pp. 423-58.

6. Ibid.

7. Diane L. Elliot et al., "Use of a Group Objective Structured Clinical Examination with First-Year Medical Students," *Academic Medicine*, vol. 69, 1994, pp. 990-92.

Textural Perceptions

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lead onward. They guide the instruction, but they do not dictate the use of school time. Students are given several chances to pass the tests and are given a variety of ways to demonstrate their proficiency on a standard over time. And every activity becomes a meaningful opportunity for learning.

1. National Education Commission on Time and Learning, *Prisoners of Time* (Washington, D.C.: U.S. Government Printing Office, April 1994), www.ed.gov/pubs/PrisonersOfTime/Prisoners.html.

2. Michael W. Apple, *Official Knowledge: Democratic Education in a Conservative Age* (New York: Routledge, 1993), p. 114.

3. Stephen Kern, *The Culture of Time and Space, 1880-1918* (Cambridge, Mass.: Harvard University Press, 1983), p. 23.

4. The names of the schools and educators have been changed to maintain confidentiality.

5. For more information on the study, see Chris Gallagher, "Charting STARS: Sustainability as Opportunity and Challenge," Year Two Report, STARS Comprehensive Evaluation Project, August 2003, www.nde.state.ne.us/stars/index.html. Unless otherwise noted, quotations presented throughout this article come from the evaluation interviews and surveys.

6. Kern, pp. 11, 20.

7. The seventh-grade language arts teachers piloted the STARS test the year before. They spent six weeks giving the various portions of the STARS test, not including preparing the students for the test. The following year, the seventh-grade teachers did not participate in the STARS test.

8. Kern, pp. 11, 24.

9. *The Writings of Henry David Thoreau*, vol. 2 (Boston: Houghton Mifflin, 1906), p. 109.

10. For more on Nebraska's approach to assessment, see Pat Roschewski, "Nebraskans Reach for the STARS," *Phi Delta Kappan*, April 2001, pp. 611-15; idem, "Nebraska STARS Line Up," *Phi Delta Kappan*, March 2003, pp. 517-20; Pat Roschewski, Jody Isernhagen, and Leon Dappen, "Nebraska STARS: Achieving Results," *Phi Delta Kappan*, February 2006, pp. 433-37; Douglas Christensen, "Building State Assessment from the Classroom Up," *School Administrator*, December 2001, p. 27; and Chris Gallagher, "Charting STARS: The State of Assessment in the State of Nebraska," August 2002, pp. 1-2, www.nde.state.ne.us/stars/resources/execsummary0101.pdf.

11. Chris Gallagher, "A Seat at the Table," *Phi Delta Kappan*, March 2000, p. 502-7.

12. Apple, p. 121.

13. John Dewey, *Democracy and Education* (1916; reprint, Carbondale: Southern Illinois University Press, 1980), pp. 112-13.