

### Make the test match the job

When your employees come back from training, how do you know whether they learned what they were supposed to learn? How can you be sure they are competent to do the tasks assigned to them? How do you document it?

One good way is to build a "criterion referenced" test into your training program. These tests focus on specific competencies to determine whether an employee has the necessary skills to do a particular task. Unfortunately, because people tend to write tests that look like the tests they took in school rather than tests that resemble the job, many seemingly well-written tests don't actually measure what they were meant to measure, according to Bill Coscarelli and Sharon Shrock, professors of instructional technology, Southern Illinois University, and authors of *Criterion-Referenced Test Development for Corporate Training: Technical and Legal Issues*, published by the International Society for Performance Improvement ([www.ispi.org](http://www.ispi.org)). "It's easier said than done to make a test that matches the job," said Shrock.

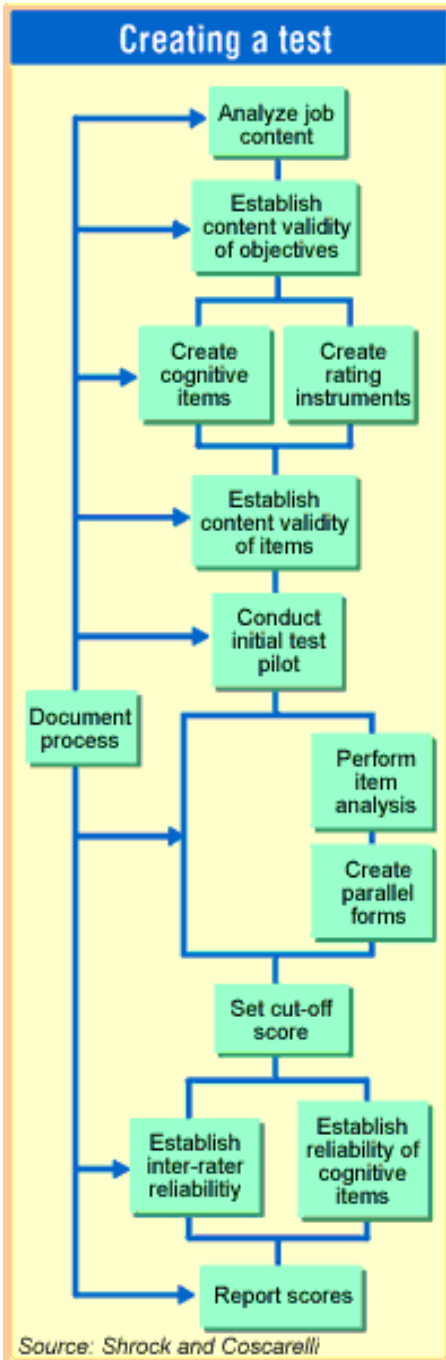
The key is to write questions that imitate the way the employee receives data and solves problems in real life, instead of asking him to recite answers he has memorized. What does he see, hear, touch? Build that into the question. Don't ask "What should you do if the machine overheats?" Instead,

describe what the gauges read, what the visual and audio clues are, then ask, "What do you do next?"

You don't have to be a professional trainer or know how to analyze complicated statistics to create a fair, accurate test, said Coscarelli. "It's not about statistics. It's just about thinking analytically." Below are the steps he and Shrock recommend for developing a criterion-referenced test:

1. **Document the process:** This ensures consistency and protects your company in case of grievances.
2. **Analyze the job content:** Get several experienced employees to list the all tasks the job requires. Make a list of objectives an employee must be able to fulfill to do the job.
3. **Validate the objectives:** Have your expert employees double-check your objectives to make sure they reflect the actual job content.
4. **Write the questions:** If you are designing a written test, write as many questions for each objective as it takes to test an employee's ability to perform that objective.
5. **Create a performance checklist:** If you are designing a performance test, write a checklist of required behaviors against which the judge can compare the employee's performance.
6. **Validate the test items:** Have your expert employees double-check your questions or performance lists to make sure they reflect the job content and the objectives.
7. **Test the test:** Try the test out on a sample of employees. Get their reactions, notice any unforeseen results, and fix any obvious problems.
8. **Analyze the results:** Analyze the test results from your sample group to uncover any questions the employees found particularly hard, easy, or confusing. Revise as necessary.
9. **Create parallel forms:** You may want to create another version of the test, to be used if the answers to the first test may have been circulated ahead of time, such as when an employee who was absent takes a make-up test.
10. **Set a cut-off score:** Have your expert employees set a cut-off score by estimating the chances that a minimally competent person would know the answer to each individual question.
11. **Check test reliability:** If you want to check the reliability of the test, have the same group of people take the same test twice within a few days. If the results changed dramatically, the test should be revised.
12. **Train the judges:** To get reliable results from performance tests, train your judges how to recognize acceptable and unacceptable performance by showing them examples of each until they all rate performances consistently.
13. **Report the scores:** Criterion-referenced tests only measure mastery or lack of mastery, so they have only two possible scores—pass or fail.

If this seems like a lot of steps, take heart. "People don't go through every step for every test they write," Shrock said, but the more skills and knowledge you have, the better you can choose when to take shortcuts. —Nancy Chase



Source: Shrock and Coscarelli