

Current Controversies Over Standardized Tests

Is There an SDA School in Lake Wobegon?

Education is famous for its "effects." We have had the "Pygmalion Effect,"¹ the "Hawthorne Effect,"² and now the "Lake Wobegon Effect."³

Immortalized by Garrison Keillor in his radio show and books, Lake Wobegon is the mythical town where "the women are strong, the men are good looking, and all the children are above average."⁴

The United States bears a suspicious resemblance to Lake Wobegon, since all 50 states have recently reported that their students scored above average on standardized achievement tests.

What's going on here? How can everyone be above average? A number of factors may be at work, including defects in test preparation and incorrect use of the norms or averages in making comparisons.

Critics point to another possible cause for the Lake Wobegon Effect. They allege that much elementary and secondary teaching and curricula are test-driven; that is, they are designed to produce higher student scores. In such cases, teachers and administrators modify their curriculum and use other unethical ways of boosting class and school averages.

The Lake Wobegon Effect is only the latest in a steady stream of controversies over standardized tests:

- Critics have condemned the practice of requiring competency tests for high school graduation and as prerequisites for taking upper-division college courses.

- Some states, like California, do not permit intelligence tests to be used

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for certain purposes.

- A number of widely used tests are accused of gender and/or ethnic bias.

- Critics denounce the way test results are used in many schools and school systems, as well as in the media.

These controversies have been widely reported in the popular press and within the educational community. The problems they highlight deserve to be taken seriously. This article will suggest some ways classroom teachers, school principals, and conference and union administrators in the Adventist educational system can address these concerns.⁵

Suggestions for Classroom Teachers

- Use proper procedures for administering tests.

When administering their own tests, teachers frequently explain items to students before or during the test and/or give them extra time to complete the ques-

tions. If these procedures are followed with standardized tests, students will undoubtedly get higher scores. However, if teachers do not follow the administrative procedures specified in the testing manual, the scores will have little meaning.

- Interpret scores correctly.

Standardized achievement tests do not measure a number of important subjects taught in Adventist schools. For example, the Iowa Tests of Basic Skills battery does not include subtests on Bible, composition, handwriting, music, art, or physical education. When reporting standardized test results to parents, be sure to emphasize the restricted nature of the tests.

Consider measurement error when interpreting scores. Small differences between subtests on one test or between a student's scores from year to year on the same test have little significance.

When you interpret scores, consider what factors may have influenced them. Low scores could result from such factors as poor reading ability, poor motivation, inadequate background from previous schools, lack of language proficiency, or temporary factors, such as illness or noise that affected student performance on the test.

Do not equate a low percentile rank score (below average) with low achievement (below the standard). All students should not be expected to be "above average" (unless you reside in Lake Wobegon). Although all students can score higher than a given standard, by definition half of the students must be below the average (median) of the group.

BY JEROME D. THAYER

In interpreting percentile ranks, be sure to identify the norm group to which your students are being compared. Good standardized tests carefully define norm groups in their administrator's manual. The Lake Wobegon Effect occurs in part because schools tend to select tests that most closely match their curriculum. However, the test norms are based on a cross-section of schools with more diverse curricula.

Adventist education has its own version of the Lake Wobegon Effect. Many of us are proud that our school or system is above the national average on standardized achievement tests. Is the national average really the standard to which we should be compared? It might make more sense to compare ourselves to other groups, such as local community schools, or other parochial or Adventist schools.

We also ought to take into account the ability level of our students and the number of years they have attended Adventist schools before we make claims about our superior achievement and the value of Adventist education.

On the positive side, at least one study has indicated that even after controlling for these factors and making the proper comparisons, Adventist students still achieve better than those in other schools. For example, a study done in the Atlantic Union over a four-year period showed that the average composite score of all students who took the Iowa Tests of Basic Skills was one month above the national average after controlling for the ability level of the students. At each grade level, the more years of Adventist education the students had had, the higher they scored, even after controlling for their ability level.⁶

- *Do not allow the results of standardized tests to negatively affect time allotment in other curricular areas.*

Resist pressure to overemphasize those subjects measured by standardized achievement tests. Worship, Bible, composition, handwriting, music, art, and physical education are important parts of a wholistic curriculum, despite the fact that students don't have to take standardized tests in these subjects.

- *Don't teach to the test in an inappropriate way.*

There are many ways to teach to the test, some good, some bad. Don't teach the actual items found on the test. While

this method does raise test scores, it also generates false information about students' general achievement level in the subject.

For the same reason, it is not a good idea to use commercial programs that purport to raise students' test scores. These programs drill students in content that closely parallels the test questions but do not increase their general understanding of the subject.

The proper way to "teach to the test" is to emphasize or modify teaching in broad areas where the class average is lower than you would expect. Such emphasis should not be limited to the specific objectives addressed by the test questions, but should include the broad domain of objectives that relate to the areas of concern.

For example, suppose the class as a whole scores poorly on two questions in a standardized test in Bible.⁷ The items relate to the SDA fundamental belief "Experience of Salvation."

To remedy this, place more emphasis on the broad areas of salvation that relate to these two questions. Don't overemphasize actual item content, or

the specific objectives measured by the items.

- *Combine other information with test results for decision making.*

Most validity studies suggest that standardized achievement and aptitude tests adequately measure achievement and predict academic performance. However, they should seldom, if ever, be used alone as indicators or predictors of achievement. A number of other factors, such as grades and personal characteristics, should also be considered.

- *In evaluating test results, keep in mind that class subscores and performance on specific items are more important than class averages for the complete test.*

Standardized achievement tests provide two types of class-related results: (1) total and subscore averages, and (2) item analysis and criterion-referenced subtest information.

Although each class's average score on the complete test is the number most likely to be emphasized in a newspaper article or report to parents, it is not the most important for the classroom teacher. Specific changes in teaching methods and/or curriculum are more likely to be

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based on the percentage of correct responses on individual items and the mean percentage of items answered correctly on subtests.

- *Modify your teaching as a result of the test scores.*

Teaching methods and curriculum should be changed if students perform poorly on individual items and subtests. Don't just send one copy of the results to the parents and then file the other copy in a cumulative record folder.

Suggestions for Principals

- *Select appropriate tests.*

Before selecting any standardized achievement or ability tests, carefully evaluate each test in terms of your curriculum and students. Standardized tests seldom conform perfectly to the curriculum of any school, but look for the one that matches most closely. Although conference- or union-selected tests may not be as good a match for your school, it is necessary for overall curriculum evaluation that the same test be used throughout the school system.

- *Monitor the administration of standardized tests.*

Provide in-service training for teachers who have not administered the tests before and conduct occasional review sessions for other teachers. Teachers must be instructed or reminded to follow standardized procedures while still helping students to do their best.

Lock up test materials before and after testing. Distribute the test booklets to teachers shortly before the testing begins and collect them shortly after testing. Make sure that all booklets are accounted for.

Check to be sure that teachers have followed proper administration procedures, such as keeping to the time limits (if any) and not coaching students before or during the test. Violations of test security and administrative procedures have been cited as possible reasons for the Lake Wobegon Effect.

- *Monitor the use of test results.*

Each year when test results come in, review with teachers the meaning of the information reported on the computer printouts. Discuss how the statistics should be used within the school and with parents.

At the end of each school year, ask every teacher to file a report indicating how he or she used test results to modify

teaching methods and/or curriculum.

- *Use caution in punishing or rewarding teachers for test results.*

Teachers should be encouraged to boost student achievement while not being blamed for poor standardized test scores. The primary purpose of testing is to obtain information for better decision making, not to evaluate teachers.

Teachers need to know that you will respond professionally if scores are lower or higher than expected. If inappropriate punishments or rewards are given, teachers will be tempted to teach to the test or use improper administrative procedures. Unusual increases in scores from year to year suggest a need to investigate these factors.

Suggestions for Conference and Union Administrators

- *Use proper procedures for selecting tests.*

Before selecting standardized tests, solicit input from a variety of teachers. This will give your teaching staff a feeling of participation in and ownership of the decisions made. If teachers feel that testing is being forced on them, they are more likely to disregard proper testing procedures.

As far as possible, make sure that each test reflects a broad range of content common to the school system.

- *Use test results for curriculum development.*

Curriculum committees should examine conference and union results at the item and subscore level to detect local strengths and weaknesses. Such evaluations can: provide data for decision making about textbooks, materials, methods, and emphasis.

- *Monitor test security.*

Each conference (or union) should have a closely monitored system that ensures that test booklets are either returned to the conference (or union) or are kept under lock and key at each school.

- *Monitor the use of test results.*

Each year, ask principals to file a report indicating how the test results helped them to make decisions about

teaching methods and/or curriculum. Outline for principals the proper way to interpret and explain test results to parents and the media.

- *Establish appropriate penalties and rewards for schools and principals.*

Encourage principals to strive for high achievement, but do not blame them or their teachers for poor achievement. Principals need to know that you will respond professionally if scores are lower or higher than expected.

Inappropriate penalties or rewards may tempt principals to encourage teaching to the test or improper administrative procedures. Investigate unusual increases in scores from year to year to see if they resulted from either of these factors.

While some critics advocate eliminating the use of standardized tests, a better approach is to select tests wisely, educate teachers to use them properly, and then monitor the use of the tests. When properly utilized, standardized tests provide invaluable decision-making information for students, teachers, and administrators. ☞

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NOTES AND REFERENCES

1. The Pygmalion Effect is named after George Bernard Shaw's play, *Pygmalion*, which became the basis for the musical and film *My Fair Lady*. The Pygmalion Effect suggests that students tend to behave the way they are treated—that is, they achieve at the level of their teachers' expectations.
2. The Hawthorne Effect is named after the Hawthorne plant where a well-known employee study of the Western Electric Corporation was conducted. In this study, researchers found that participants in an experiment tend to perform better because they know they are being studied.
3. John J. Connell, "Nationally Normed Elementary Achievement Testing in America's Public Schools: How All 50 States Are Testing Above the National Average," *Educational Measurement Issues and Practice*, 7:2 (Summer 1988), p. 5.
4. Cited in an editorial by Walter M. Haney, *Educational Measurement Issues and Practice*, 7:2 (Summer 1988), p. 4.
5. A more general article on this topic is Jerome D. Thayer's "Standardized Tests: Uses and Abuses," *Journal of Adventist Education* (Summer 1984), p. 14.
6. Jerome Thayer, "Will My Child Suffer Scholastically if He Attends Church School?" *Adventist Review* (August 31, 1978), p. 11.
7. A standardized Seventh-day Adventist Religion Achievement Test developed by the Lake and Southern union conferences has been used since the 1988-1989 school year.