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## Research Update on End-of-Grade Testing: Assessment of Reading Comprehension

*This publication is an update to the Spring 1995 Assessment Brief "Research on End-of-Grade Testing: Assessment of Reading" (Vol. 1, no. 9).*

### ABCs of Public Education

The ABCs of Public Education is a comprehensive plan to reorganize public schools in North Carolina. This plan focuses on:

- strong accountability,
- emphasis on the basics and on high educational standards, and
- maximum local control.

The ABCs Plan places a renewed emphasis on reading, writing, and mathematics, especially in the early grades.

### Background on Reading Comprehension Assessment

The North Carolina End-of-Grade Test of Reading Comprehension is a multiple-choice test that assesses a student's ability to read authentic passages and make meaning from what is read. Although a separate vocabulary section is not included on the reading test, vocabulary is assessed indirectly through application and understanding within the context of the passages and the questions. Passages selected for the reading tests were chosen to reflect the variety of reading done by students in and out of the classroom. Passages include literature (short stories, poems, and essays); informational selections in content areas (social studies, science, art, health, and mathematics); and consumer and practical selections (pamphlets, recipes, and projects). This variety allows for the assessment of reading for various purposes: for literary experience, to gain information, and to perform a task.

### Reporting Reading Performance

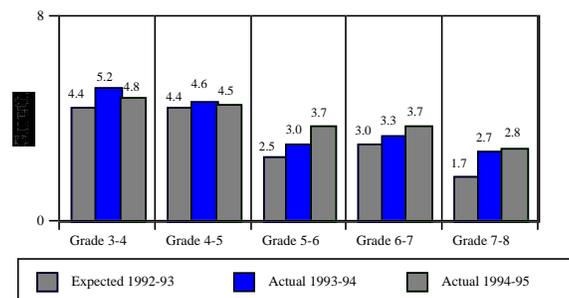
Student performance in reading comprehension is reported in a variety of contexts, including developmental scale scores and achievement levels. Group and subgroup scores are also reported.

Although the reading tests were developed as accountability tests, curriculum information is provided on the goal summary reports. In addition, developmental scale scores depict the amount of growth that actually occurs in student achievement over time. These scores can be used to compare the expected rate of growth (i.e., 1992-93 benchmarks) to actual student or group performance as the student(s) move from grade 3 to grade 8. Achievement levels show how a student or group of students performed in relation to predetermined grade level standards set using teacher judgment linked to student performance.

### Trends in Reading Performance

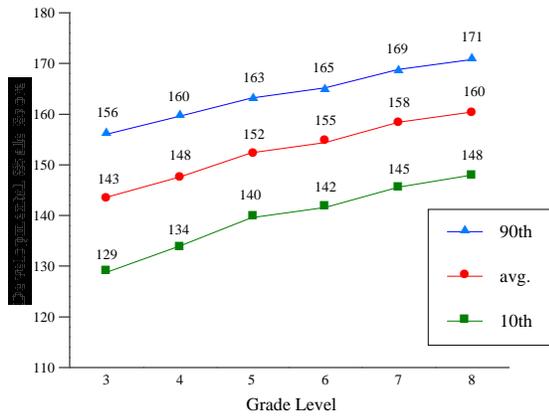
**Growth.** Proficiency in reading comprehension is crucial to a student's success in all other subject areas. Figure 1 shows that the actual growth (performance in 1994 and in 1995) in reading exceeded the expected growth (benchmarks established in 1993) for each cohort group. In addition, the rate of growth increased over that found in 1993-94 in three of the five grade-level comparisons. This performance indicates that for current classes, students generally are better readers than the students were in 1992-93 when the benchmarks were established. Therefore, students in subsequent classes require more challenging learning opportunities in reading.

Figure 1. End-of-Grade Reading Results for 1992-93, 1993-94, and 1994-95: Expected and Actual Growth



If the rate of growth seen as students move between most grades in both 1993-94 and 1994-95 continues, it is projected that eighth-grade students in 1997-98 will be approximately one year ahead of their eighth-grade counterparts in 1992-93.

**Figure 2. End-of-Grade Reading Results for 1994-95**



The results from the reading test in 1994-95 are depicted in Figure 2 and the following observations can be seen:

- The average score of the top 10 percent of third graders is one point above the average score for all sixth graders.
- The rate of growth in reading for all categories of students is somewhat steep in the earlier grades, but levels off in the middle grades.
- Students performing at the 10th percentile are demonstrating growth at about the same rate as the average performance for all students or the students performing at the 90th percentile.
- There is a wide range of achievement in reading within each grade level and within many classrooms.

**Achievement Levels.** The four achievement levels are standards established using teacher judgment during the initial development of the end-of-grade tests linked with student performance on the tests. The achievement levels set forth expectations of performance in reading at each grade. Students performing at Level I do not demonstrate mastery of grade-level competencies in reading; students performing at Level II demonstrate inconsistent mastery. In 1995, the State Board of Education established Levels III and IV, or consistent and superior mastery of grade-level competencies respectively, as the standard of performance for each grade. The State Board also stated that students performing at Levels I and II should receive some type of focused intervention at the local level in order to be successful.

**Figure 3. Percent of Students at each Achievement Level in Reading Across All Grades for 1992-93, 1993-94, and 1994-95.**

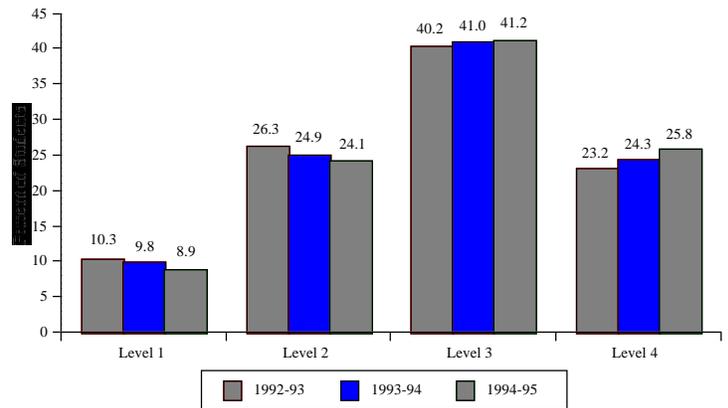


Figure 3 shows the percent of students in reading across all grades statewide at each of the four achievement levels from 1992-93, 1993-94, and 1994-95. The percentage of students across all grades achieving at Level I continues to decrease, from 10.3 percent in 1992-93 to 9.8 percent in 1993-94 to 8.9 percent in 1994-95. The percentage of students across all grades achieving at Levels III and IV (i.e., combining Levels III and IV to depict at or above grade level proficiency) continues to increase, from 63.4 percent in 1992-93 to 65.3 percent in 1993-94 to 67.0 percent in 1994-95.

A comparison of the 1994-95 state-level reading data to the 1992-93 baseline data shows that the percent of students performing at achievement levels III and IV (i.e., at grade level or above) in reading has improved across all grade levels since 1992-93. The increase in students achieving at Levels III and IV means that about 15,000 additional students in 1994-95, or approximately 30,000 additional students since end-of-grade testing began in 1992-93, are reaching grade level proficiency in reading.

### Trends in Reading Subgroup Performance

Reading results extracted from state-level subgroup data across all grades in 1994-95 reveal the following:

- On the average, females tend to score higher than males by at least two scale score points at each grade level.
- Average scores for Black students were lower than the average scores for White students, with Black students performing, on the average, one grade level behind White students.
- The average score by grade level for students who reported that they do not complete assigned homework is consistently below Level III. Scores are highest for students who do 5-10 hours of homework each week.