

ED289119

Delaware Educational Assessment Program

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1986

Statewide Test Results

SUMMARY REPORT

Delaware State Department of Public Instruction

BEST COPY AVAILABLE

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DEPARTMENT OF PUBLIC INSTRUCTION
DOVER

I am pleased to present the summary results of the Spring 1986 Delaware Educational Assessment Program.

The Delaware State Board of Education is committed to providing a quality education for each student in Delaware's public school system. Central to this commitment is the need to assess and examine the performance of the public schools and their pupils as the basis for initiating constructive change in the educational system.

Through the assessment program, information is also provided to the schools about how well Delaware public school students perform important basic skills, and to parents about how well their children perform compared to other students in the nation, the state and in their local school district.

The staff members of the Planning, Research, and Evaluation Division provide not only an extensive array of reports on the results of the 1986 assessment but also assist educators and policy makers to fully understand test results in order that plans can be made and programs implemented to make further improvements in Delaware's public schools.

Identification of specific strengths and weaknesses in the basic skill areas allows Delawareans to build upon existing strengths and to focus resources on identified needs. In this way, the goal of providing a quality education for each student may be reached.

William B. Keene

William B. Keene
State Superintendent
Delaware Department of Public
Instruction

ACKNOWLEDGEMENTS

The success of the Delaware Educational Assessment Program is due to the cooperative efforts of many individuals. Department of Public Instruction staff in the Planning, Research, and Evaluation Division with responsibility for the testing program include Robert A. Bigelow, State Supervisor of Educational Assessment; Robin R. Taylor, State Specialist of Educational Assessment; Alice L. Valdes, State Supervisor of Educational Planning; and Gail R. Truxon, Secretary. This report was compiled through the combined efforts of the above listed staff members.

Recognition is extended to District Testing Coordinators for time and energy devoted to implementing the Delaware Educational Assessment Program effectively and efficiently at the local level. Those who served in this capacity during the 1985-86 administration of the program include:

District Test Coordinators

Howard Gaines, Appoquinimink
Joseph Price, Brandywine
George Benner, Caesar Rodney
Edward Schaefer, Cape Henlopen
Joseph Crossen, Capital
Peter Idstein, Christina
Richard Bulls, Colonial
Margaret Clayton, Delmar
Judith Cullen, Indian River

Arthur Gilbert, Lake Forest
William Long, Laurel
Charles Moses, Milford
Edward Barrett, New Castle Vo-Tech.
William Wallace, Red Clay Consolidated
Stephen Schwartz, Seaford
Wayne Barton, Smyrna
Charles Davis, Woodbridge

Special recognition is extended to all school coordinators and teachers/examiners in each school within the State. Without their extensive involvement and dedication, the Delaware Educational Assessment Program could not be successfully and reliably implemented within our State's schools.

Wilmer E. Wise

Wilmer E. Wise, State Director
Planning, Research, and
Evaluation.

INTRODUCTION

Governor P.S. duPont signed into law HB 845 in 1978 which provided for the implementation of a statewide achievement testing program in Delaware. This legislation helped to shape the Delaware Educational Assessment Program. The provisions of HB 845, 129th General Assembly (14 Delaware Code §122(B)(17)) included:

- Statewide standardized testing in grades one through eight and eleven in the content areas of reading, English and mathematics;
- Calculation of averages at the school, district, and state levels by grade and subject area;
- Analysis of test results by school district staff and the development of a plan to remedy the weaknesses identified;
- Reporting of individual achievement progress to parents.

For the first five years of the program the test battery used was the *California Achievement Test*, normed in 1977. Comparisons made between Delaware and the nation during this period of time were based on the 1977 norms.

By 1983 it seemed likely that comparisons between current Delaware performance and six-year-old estimates of national performance might not accurately reflect current student performance, particularly if improvement in basic skills at the national level was similar to that in Delaware.

In the interest of continuing to provide valid comparative information, a new test, the *Comprehensive Tests of Basic Skills*, was administered in the 1983-84 school year and again in the 1984-85 and 1985-86 school years. Norms for this test were established in the school year 1980-81. Parallel forms, Forms U and V, are available with the *Comprehensive Tests of Basic Skills*. Form U was administered the first two years and Form V was used this year.

This summary report includes a general description of the test and type of test score followed by state and district results. The complete Delaware Educational Assessment Program Report to the Legislature will be available in the Fall of 1986 from the Department of Public Instruction. The complete report will include individual school results, local district analyses of strengths and weaknesses and district plans to remedy identified areas of weaknesses.

DELAWARE EDUCATIONAL ASSESSMENT PROGRAM

The Delaware Educational Assessment Program (DEAP) provides for the annual test administration, scoring and reporting of the statewide test results. It is administered by the Planning, Research, and Evaluation Division of the Department of Public Instruction.

In addition, the assessment program undertakes activities to improve the usefulness of the data and their use in the schools. To this end, the program:

- provides training in the use and interpretation of test data in curriculum and instructional improvement;
- supports a computerized system for immediate access to and use of test data for program management and evaluation;
- produces reports for classroom teachers to use in instructional diagnosis by reorganizing student data to match class enrollments at the beginning of the school year. In 1985-86, approximately 76 schools requested special reports for their teachers.

This program provides many types of computer-generated reports of student test performances for parents, teachers, principals, and for district and state administrators. Reports to parents and teachers provide data for individual students while the remainder provide data for groups of students.

DESCRIPTION OF THE TEST AND TYPE OF SCORE REPORTED

WHAT KIND OF TEST WAS GIVEN?

During the period of April 9-17, 1986, approximately 60,000 Delaware public school students in grades one through eight and eleven were administered a battery of achievement tests as part of the state-funded Delaware Educational Assessment Program (DEAP). The nationally normed, standardized *Comprehensive Tests of Basic Skills (CTBS)*, Form V, containing from 145 to 380 test items per grade in reading, language arts and mathematics was used. In addition, science and social studies were tested at grade eleven. The *Comprehensive Tests of Basic Skills* which is published by CTB/McGraw-Hill has parallel Forms, U and V. In 1984 and 1985 Form U was administered. This year Form V, the alternate form, was used. The test battery was normed in the Fall of 1980 and Spring of 1981 on a representative national sample of over 250,000 students.

HOW WERE TESTS ADMINISTERED?

Delaware students in grades one through three received machine-scorable booklets while those in grades four through eight and eleven received test booklets with separate answer sheets. Student responses were machine scored and analyzed. Computer reports were then generated at the individual pupil, school, district and state level. These reports were returned to Delaware educators before the end of the school year and are available over the summer months for instructional planning. Individual pupil reports are distributed to parents at the end of the school year.

WHAT STUDENTS ARE TESTED?

The statewide testing program includes all regular and special education students in grades one through, eight and eleven with the exception of students in special schools or intensive learning centers. Students excepted are those with severe handicapping conditions such as autism, vision or hearing impairments. Results for this year's test included in this report are average scores for the entire group of regular and special education students.

WHAT STUDENTS ARE INCLUDED IN THE STATE AND DISTRICT AVERAGES?

The averages for Total Reading, Total Language, and Total Mathematics include only those students that took all subtests within that content area. For example, students who received a Total Mathematics score completed both the Mathematics Computation and the Mathematics Concepts and Applications subtests. Students completing only one of the two subtests would not be counted in their grade averages. In addition, students included in the Total Test Battery* average are those students who have completed every subtest in Reading, Language and Mathematics, those who completed the entire test.

WHAT CONTENT AREAS ARE TESTED?

The content areas included in the *Comprehensive Tests of Basic Skills* are presented in Table 1. The Reading section of the CTBS includes Reading Vocabulary and Reading Comprehension. In this publication the Word Attack subtest for grades one through three is shown in the Reading section. The Word Attack average **is not** included in computing the Total Reading average or in the Total Battery average. The Language section is composed of only Language Expression at grade one and Language Mechanics and Language Expression at all other grade levels. In this publication the Spelling subtest and the Reference Skills subtest are shown in the Language section. These subtests **are not** included in computing the Total Language average score. Mathematics Computation and Mathematics Concepts and Applications comprise the Mathematics section of the *Comprehensive Tests of Basic Skills*. Science and Social Studies are included at the eleventh-grade level only.

* *Since the first grade test does not produce a score for Total Language, there is no score for Total Battery at this grade level.*

TABLE 1
CONTENT AREAS TESTED BY THE
COMPREHENSIVE TESTS OF BASIC SKILLS
SPRING 1986

DELAWARE EDUCATIONAL ASSESSMENT PROGRAM

| Content Area | Grades Tested |
|---------------------------------------|---------------|
| Reading | |
| Word Attack | 1 - 3 |
| Reading Vocabulary | 1 - 8, 11 |
| Reading Comprehension | 1 - 8, 11 |
| Language | |
| Language Expression | 1 - 8, 11 |
| Language Mechanics | 2 - 8, 11 |
| Spelling | 2 - 8, 11 |
| Reference Skills | 4 - 8, 11 |
| Mathematics | |
| Mathematics Computation | 1 - 8, 11 |
| Mathematics Concepts and Applications | 1 - 8, 11 |
| Science | 11 |
| Social Studies | 11 |

WHAT TYPE OF TEST SCORE IS REPORTED?

The score used within this report is called the Normal Curve Equivalent (NCE). The NCE is a standard score scale with a national average of 50 and a range of scores from 1 to 99. This scale was selected because it enables comparisons to be made between different subtests and to the national average for all grades tested.

HOW CAN SCORES BE INTERPRETED?

When reading and interpreting district and state averages provided in this report, scores can be put in perspective by comparing the test score to the national average. Average scores higher than 50 are above the national norm.

WHY DO WE TEST?

Annual testing is conducted to provide student performance data useful for:

- diagnosing individual pupil strengths and weaknesses;
- placing students in instructional groups or programs;
- guidance and counseling;
- identifying curricular and instructional weaknesses;
- instructional planning;
- evaluating programs.

1986 STATE RESULTS

HOW WELL DID WE DO IN CONTENT AREAS THIS YEAR?

The overall performance by Delaware students tested (regular and special education combined) was above the national average in all content areas at all grade levels as shown in Table 2. In all grades, Total Mathematics scores were higher than Total Reading scores. In all grades for which Total Language scores were available, the Total Language scores were higher than Total Reading scores.

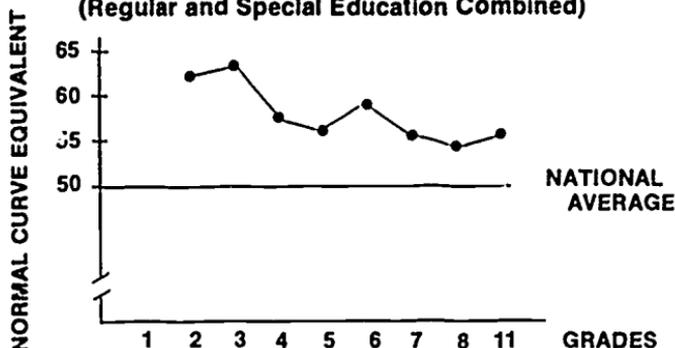
TABLE 2
AVERAGE SCORES FOR DELAWARE STUDENTS
SPRING 1986
DELAWARE EDUCATIONAL ASSESSMENT PROGRAM
(Regular and Special Education Combined)

| Content Areas | Grades | | | | | | | | | |
|-------------------|--------|------|------|------|------|------|------|------|------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 11 | |
| Total Reading | 52.6 | 57.0 | 55.0 | 56.0 | 52.7 | 54.1 | 53.7 | 53.2 | 52.3 | |
| Total Language | - | 63.2 | 66.0 | 57.5 | 57.4 | 59.8 | 55.8 | 55.5 | 57.0 | |
| Total Mathematics | 58.7 | 68.3 | 63.0 | 60.1 | 61.7 | 61.6 | 57.0 | 56.1 | 55.3 | |
| Total Battery | - | 62.2 | 63.3 | 57.6 | 56.1 | 59.0 | 55.3 | 54.3 | 55.7 | |
| Science | - | - | - | - | - | - | - | - | 55.4 | |
| Social Studies | - | - | - | - | - | - | - | - | 55.2 | |

NOTE. Score is the Normal Curve Equivalent which has a national average of 50.0.

Comparisons across grades. Generally, students in the primary grades obtained higher scores than those in upper grades. Figure 1 shows a graph of the Total Battery scores across all grades for which Total Battery scores were available.

FIGURE 1
AVERAGE SCORES FOR DELAWARE STUDENTS
TOTAL BATTERY
SPRING 1986
DELAWARE EDUCATIONAL ASSESSMENT PROGRAM
(Regular and Special Education Combined)



Reading. The Reading test consists of Reading Vocabulary and Reading Comprehension subtests. Statewide averages in Reading were above the national average at all grades tested. Total Reading scores were lower than Total Language scores and Total Mathematics scores at all grade levels. Reading subtest scores are shown in Table 3. The Word Attack subtest is included in the reading section because of its relationship to reading in the instructional setting.

TABLE 3
AVERAGE SCORES FOR DELAWARE STUDENTS
READING
SPRING 1986
DELAWARE EDUCATIONAL ASSESSMENT PROGRAM
(Regular and Special Education Students Combined)

| Content Areas | Grades | | | | | | | | | |
|--------------------|--------|------|------|------|------|------|------|------|------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 11 | |
| Word Attack | 54.1 | 58.1 | 61.9 | - | - | - | - | - | - | - |
| Reading Vocabulary | 54.1 | 57.6 | 53.4 | 56.4 | 54.0 | 54.2 | 51.7 | 51.5 | 50.0 | |
| Reading Compre. | 51.8 | 56.0 | 54.9 | 54.3 | 51.8 | 53.8 | 55.5 | 54.5 | 52.9 | |
| Total Reading | 52.6 | 57.0 | 55.0 | 56.0 | 52.7 | 54.1 | 53.7 | 53.2 | 52.3 | |

NOTE. Score is the Normal Curve Equivalent which has a national average of 50.0.

Language Arts The Language test consists of Language Mechanics and Language Expression subtests. Language subtest scores are shown in Table 4. Test data for Spelling and Reference Skills are also shown in Table 4 because of their relationship to Language Arts in the instructional setting. Statewide average Total Language scores were above the national average for all grades tested. Total Language scores were higher than Total Reading scores at all grade levels.

TABLE 4
AVERAGE SCORES FOR DELAWARE STUDENTS
LANGUAGE
SPRING 1986
DELAWARE EDUCATIONAL ASSESSMENT PROGRAM
(Regular and Special Education Students Combined)

| Content Area | Grades | | | | | | | | | |
|------------------|--------|------|------|------|------|------|------|------|------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 11 | |
| Language Mech. | - | 63.6 | 68.4 | 58.4 | 56.8 | 57.5 | 54.2 | 53.4 | 55.7 | |
| Language Expre. | 56.4 | 59.0 | 62.0 | 57.1 | 55.4 | 57.5 | 58.6 | 58.3 | 56.8 | |
| Total Language | - | 63.2 | 66.0 | 57.5 | 57.4 | 59.8 | 55.8 | 55.5 | 57.0 | |
| Spelling | - | 61.6 | 62.0 | 55.4 | 54.0 | 55.7 | 55.1 | 56.2 | 58.6 | |
| Reference Skills | - | - | - | 54.9 | 55.3 | 57.2 | 55.6 | 56.8 | 50.5 | |

NOTE. Score is the Normal Curve Equivalent which has a national average of 50.0.

Mathematics. The Mathematics test includes two subtests, Mathematics Computation and Mathematics Concepts and Applications. Statewide average Total Mathematics scores for Delaware students were above the national average for all grades tested. Total Mathematics scores were higher than Total Reading scores at all grade levels. Mathematics subtest scores are shown in Table 5.

TABLE 5
AVERAGE SCORES FOR DELAWARE STUDENTS
MATHEMATICS
SPRING 1986
DELAWARE EDUCATIONAL ASSESSMENT PROGRAMS
(Regular and Special Education Combined)

| Content Areas | Grades | | | | | | | | | |
|-----------------------------------|--------|------|------|------|------|------|------|------|------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 11 | |
| Math Computation | 52.0 | 66.6 | 62.2 | 59.4 | 62.2 | 61.8 | 59.1 | 58.1 | 55.3 | |
| Math Concepts and Applications | 64.0 | 62.6 | 61.7 | 60.5 | 57.8 | 57.7 | 56.1 | 53.8 | 53.6 | |
| Total Math | 58.7 | 68.3 | 63.0 | 60.1 | 61.7 | 61.6 | 57.0 | 56.1 | 55.3 | |

NOTE: Score is the Normal Curve Equivalent which has a national average of 50.0.

Science. The Science test was only administered in grade eleven. No subtest scores are available. The average NCE score for Delaware students was 55.4. The national average is 50.0.

Social Studies. The Social Studies test was only administered in grade eleven. No subtest scores are available. The average NCE score for Delaware students was 55.2. The national average is 50.0.

Summary. Average Delaware student performance was above the national average at all grade levels. Overall, performance was higher in Mathematics and Language than in Reading. Higher average scores were reported in the primary grades. In general, these trends across grades and subtests are the same as those reported in the 1984 and 1985 Statewide Test Results Report. Component objective data are shown in the Appendix by content area. In the Appendix, entries labeled percent correct, are averages of the percentage of students responding correctly to each of the items testing the category objective. These data are for the combination of Delaware regular and special education students and for the national sample.

1986 DISTRICT RESULTS

HOW WELL DID INDIVIDUAL DISTRICTS DO ON THE TESTS?

School district average scores for each of the basic skill areas are presented by grade level in Tables 7 through 11. Analysis of standardized test results, such as comparing average performance to national norms and identifying trends in previous performance helps local school officials detect strengths and weaknesses in district educational programs.

Differences between district test averages and the nation should be reviewed in light of important factors which interact to make each district unique. Factors to be considered in this review may include background characteristics of the students within the school, the match between curriculum objectives and the objectives assessed by the test, student mobility, dropout rate, student ability, local curriculum priorities and available financial resources. Some of these factors are shown in Table 6.

TABLE 6
SELECTED FACTORS UNIQUE TO EACH SCHOOL DISTRICT
1985-86 SCHOOL YEAR

| District | % Free or Reduced Lunch* | % Special Education Students** | Dropout Rate* | Current Expenditure Per Pupil* (Excludes Special Schools) |
|----------------|-----------------------------|--------------------------------------|------------------|--|
| STATE | 42.1 | 11.5 | 7.6 | \$3,825 |
| Appoquinimink | 22.0 | 10.5 | 6.4 | \$3,142 |
| Brandywine | 39.8 | 10.0 | 5.8 | \$3,689 |
| Caesar Rodney | 39.8 | 8.6 | 7.8 | \$2,773 |
| Cape Henlopen | 38.6 | 13.0 | 5.2 | \$3,493 |
| Capital | 35.4 | 9.9 | 10.4 | \$3,280 |
| Christina | 49.9 | 13.2 | 8.8 | \$3,621 |
| Colonial | 43.4 | 11.9 | 14.2 | \$3,556 |
| Delmar | 20.3 | 6.9 | 2.7 | \$3,327 |
| Indian River | 38.9 | 11.8 | 6.8 | \$2,842 |
| Lake Forest | 39.3 | 12.2 | 9.2 | \$2,942 |
| Laurel | 38.7 | 8.2 | 9.0 | \$2,846 |
| Milford | 40.2 | 10.8 | 9.8 | \$2,788 |
| NCC Voc-Tech. | 51.5 | 14.4 | 1.7 | \$4,940 |
| Red Clay Cons. | 52.3 | 11.9 | 9.8 | \$3,886 |
| Seaford | 36.3 | 10.1 | 6.5 | \$2,926 |
| Smyrna | 31.6 | 9.7 | 3.0 | \$2,875 |
| Woodbridge | 47.4 | 15.4 | 1.7 | \$3,170 |

* Reflects the most current data available, 1984-85 school year

** Reflects the 1985-86 school year.

**TABLE 7
READING
AVERAGE NCE SCORES FOR
DELAWARE SCHOOL DISTRICTS*
(Regular and Special Education Combined)**

| District | Grades | | | | | | | | | |
|----------------|--------|------|------|------|------|------|------|------|------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 11 | |
| STATE | 52.6 | 57.0 | 55.0 | 56.0 | 52.7 | 54.1 | 53.7 | 53.2 | 52.3 | |
| Appoquinimink | 55.4 | 55.9 | 53.0 | 58.7 | 54.8 | 55.4 | 53.4 | 53.7 | 49.7 | |
| Brandywine | 56.9 | 60.2 | 58.0 | 58.9 | 55.2 | 57.9 | 55.4 | 55.2 | 59.3 | |
| Caesar Rodney | 51.3 | 56.8 | 54.6 | 57.9 | 53.9 | 57.4 | 55.4 | 54.6 | 54.5 | |
| Cape Henlopen | 55.9 | 61.3 | 57.4 | 60.8 | 56.5 | 57.0 | 54.2 | 55.8 | 52.3 | |
| Capital | 50.8 | 50.7 | 51.4 | 54.2 | 50.7 | 52.4 | 53.9 | 52.9 | 55.3 | |
| Christina | 54.1 | 59.3 | 57.1 | 55.5 | 53.0 | 56.0 | 53.9 | 53.5 | 56.1 | |
| Colonial | 48.3 | 56.1 | 52.9 | 54.6 | 48.9 | 49.6 | 52.5 | 51.7 | 50.3 | |
| Delmar | - | - | - | - | - | - | 54.2 | 52.3 | 49.5 | |
| Indian River | 54.2 | 58.3 | 55.2 | 50.7 | 53.0 | 55.2 | 53.0 | 50.7 | 48.2 | |
| Lake Forest | 56.9 | 55.9 | 52.7 | 55.6 | 52.0 | 52.3 | 54.4 | 50.5 | 51.0 | |
| Laurel | 50.1 | 55.4 | 53.1 | 54.3 | 48.4 | 50.4 | 51.6 | 48.9 | 49.2 | |
| Milford | 51.7 | 56.1 | 53.8 | 57.3 | 55.3 | 55.6 | 55.2 | 53.2 | 49.8 | |
| NCC Voc-Tech. | - | - | - | - | - | - | - | - | 43.6 | |
| Red Clay Cons. | 49.8 | 56.1 | 54.9 | 55.9 | 52.8 | 54.7 | 53.9 | 54.3 | 53.5 | |
| Seaford | 51.5 | 54.5 | 52.7 | 56.2 | 51.0 | 51.0 | 52.6 | 52.9 | 52.6 | |
| Smyrna | 54.3 | 55.4 | 55.4 | 57.1 | 54.3 | 51.6 | 49.9 | 52.2 | 50.6 | |
| Woodbridge | 51.4 | 52.8 | 51.1 | 55.3 | 51.9 | 50.5 | 49.4 | 49.2 | 43.7 | |

**TABLE 8
LANGUAGE
AVERAGE NCE SCORES FOR
DELAWARE SCHOOL DISTRICTS*
(Regular and Special Education Combined)**

| District | Grades | | | | | | | | | |
|----------------|--------|------|------|------|------|------|------|------|------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 11 | |
| STATE | - | 63.2 | 66.0 | 57.5 | 57.4 | 59.8 | 55.8 | 55.5 | 57.0 | |
| Appoquinimink | - | 62.0 | 64.8 | 60.6 | 59.7 | 56.0 | 54.6 | 51.8 | 54.8 | |
| Brandywine | - | 65.1 | 67.4 | 60.4 | 59.2 | 62.1 | 56.0 | 57.3 | 61.9 | |
| Caesar Rodney | - | 63.8 | 64.2 | 59.8 | 59.4 | 64.0 | 56.2 | 55.5 | 57.3 | |
| Cape Henlopen | - | 69.1 | 68.5 | 64.2 | 60.4 | 61.8 | 56.9 | 58.5 | 59.9 | |
| Capital | - | 56.5 | 62.5 | 55.0 | 53.4 | 58.5 | 55.9 | 53.7 | 59.1 | |
| Christina | - | 64.6 | 68.3 | 56.2 | 58.7 | 62.3 | 55.7 | 55.6 | 56.5 | |
| Colonial | - | 64.0 | 64.5 | 55.7 | 53.2 | 53.7 | 53.3 | 53.4 | 55.2 | |
| Delmar | - | - | - | - | - | - | 52.1 | 52.5 | 59.2 | |
| Indian River | - | 68.4 | 69.7 | 57.6 | 60.3 | 63.0 | 57.2 | 57.6 | 55.6 | |
| Lake Forest | - | 58.9 | 64.3 | 57.2 | 56.7 | 58.5 | 57.5 | 52.7 | 60.0 | |
| Laurel | - | 65.4 | 64.8 | 57.3 | 56.1 | 56.8 | 56.2 | 54.3 | 56.3 | |
| Milford | - | 61.2 | 65.1 | 58.2 | 61.3 | 62.3 | 58.8 | 57.7 | 58.5 | |
| NCC Voc-Tech. | - | - | - | - | - | - | - | - | 48.7 | |
| Red Clay Cons. | - | 61.3 | 65.0 | 55.9 | 56.4 | 61.2 | 57.6 | 56.6 | 60.0 | |
| Seaford | - | 60.7 | 65.9 | 58.2 | 56.6 | 56.6 | 54.5 | 56.6 | 58.9 | |
| Smyrna | - | 59.9 | 63.9 | 57.4 | 55.4 | 57.7 | 52.2 | 53.8 | 55.7 | |
| Woodbridge | - | 60.9 | 61.6 | 55.4 | 54.4 | 55.1 | 51.2 | 49.0 | 46.3 | |

* The national average Normal Curve Equivalent score is 50.0.

**TABLE 9
MATHEMATICS
AVERAGE NCE SCORES FOR
DELAWARE SCHOOL DISTRICTS*
(Regular and Special Education Combined)**

| District | Grades | | | | | | | | | |
|----------------|--------|------|------|------|------|------|------|------|------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 11 | |
| STATE | 58.7 | 68.3 | 63.0 | 60.1 | 61.7 | 61.6 | 57.0 | 56.1 | 55.3 | |
| Appoquinimink | 57.9 | 68.4 | 61.6 | 62.2 | 63.0 | 60.0 | 57.8 | 53.8 | 51.4 | |
| Brandywine | 63.3 | 69.6 | 66.7 | 62.8 | 64.7 | 63.9 | 59.2 | 57.6 | 60.3 | |
| Caesar Rodney | 58.2 | 68.7 | 63.4 | 61.1 | 64.7 | 67.3 | 59.6 | 61.4 | 58.6 | |
| Cape Henlopen | 60.2 | 75.3 | 67.8 | 69.0 | 66.7 | 66.7 | 57.4 | 56.5 | 54.6 | |
| Capital | 53.8 | 58.1 | 59.7 | 58.2 | 57.2 | 58.9 | 54.9 | 55.3 | 60.3 | |
| Christina | 59.0 | 69.2 | 64.4 | 59.3 | 60.3 | 62.6 | 56.3 | 56.9 | 58.5 | |
| Colonial | 54.3 | 70.1 | 59.7 | 58.5 | 56.7 | 55.9 | 54.0 | 51.9 | 52.2 | |
| Delmar | - | - | - | - | - | - | 56.8 | 51.2 | 51.6 | |
| Indian River | 57.1 | 69.1 | 63.5 | 56.7 | 65.1 | 66.9 | 59.4 | 57.1 | 51.7 | |
| Lake Forest | 65.7 | 67.3 | 61.9 | 58.1 | 63.2 | 61.8 | 55.0 | 50.0 | 55.0 | |
| Laurel | 56.9 | 69.3 | 60.4 | 59.6 | 62.4 | 57.6 | 57.8 | 51.2 | 49.2 | |
| Milford | 63.5 | 71.3 | 63.8 | 62.8 | 65.7 | 64.5 | 61.7 | 60.4 | 58.3 | |
| NCC Voc-Tech. | - | - | - | - | - | - | - | - | 47.8 | |
| Red Clay Cons. | 57.7 | 66.8 | 61.4 | 58.1 | 60.3 | 62.4 | 57.1 | 57.1 | 56.7 | |
| Seaford | 59.9 | 69.1 | 63.5 | 64.7 | 62.7 | 57.4 | 54.6 | 55.7 | 54.3 | |
| Smyrna | 62.8 | 66.0 | 54.0 | 61.9 | 64.3 | 56.9 | 57.7 | 57.7 | 56.2 | |
| Woodbridge | 56.8 | 63.1 | 61.6 | 54.9 | 58.7 | 60.0 | 50.7 | 49.2 | 43.7 | |

**TABLE 10
TOTAL BATTERY
AVERAGE NCE SCORES FOR
DELAWARE SCHOOL DISTRICTS*
(Regular and Special Education Combined)**

| District | Grades | | | | | | | | | |
|----------------|--------|------|------|------|------|------|------|------|------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 11 | |
| STATE | - | 62.2 | 63.3 | 57.6 | 56.1 | 59.0 | 55.3 | 54.3 | 55.7 | |
| Appoquinimink | - | 61.0 | 61.3 | 60.7 | 58.0 | 57.5 | 54.4 | 52.0 | 52.6 | |
| Brandywine | - | 64.7 | 66.6 | 60.8 | 58.9 | 62.6 | 56.6 | 56.4 | 62.3 | |
| Caesar Rodney | - | 62.3 | 62.4 | 59.4 | 57.7 | 63.2 | 56.4 | 55.7 | 57.2 | |
| Cape Henlopen | - | 68.6 | 67.2 | 64.5 | 60.0 | 62.2 | 55.8 | 56.5 | 56.7 | |
| Capital | - | 53.9 | 59.3 | 55.5 | 52.4 | 57.3 | 54.8 | 53.4 | 58.7 | |
| Christina | - | 63.9 | 65.8 | 56.6 | 56.3 | 61.1 | 55.2 | 54.6 | 58.1 | |
| Colonial | - | 62.6 | 60.5 | 55.8 | 51.5 | 52.9 | 52.9 | 51.7 | 53.0 | |
| Delmar | - | - | - | - | - | - | 53.6 | 51.5 | 54.1 | |
| Indian River | - | 65.1 | 65.1 | 54.5 | 58.3 | 61.9 | 56.1 | 54.3 | 52.3 | |
| Lake Forest | - | 59.7 | 60.9 | 56.9 | 55.6 | 57.5 | 56.2 | 50.6 | 56.3 | |
| Laurel | - | 62.8 | 61.2 | 57.0 | 54.4 | 55.1 | 54.1 | 50.9 | 52.6 | |
| Milford | - | 62.1 | 63.0 | 59.1 | 60.1 | 61.5 | 58.5 | 56.7 | 55.8 | |
| NCC Voc-Tech. | - | - | - | - | - | - | - | - | 46.5 | |
| Red Clay Cons. | - | 60.6 | 62.3 | 56.6 | 55.5 | 60.3 | 56.4 | 55.7 | 58.1 | |
| Seaford | - | 60.6 | 62.4 | 59.1 | 55.1 | 55.1 | 53.8 | 54.5 | 56.2 | |
| Smyrna | - | 59.0 | 62.8 | 58.5 | 56.9 | 55.9 | 52.2 | 53.8 | 54.5 | |
| Woodbridge | - | 58.2 | 59.8 | 55.4 | 54.0 | 54.9 | 50.6 | 48.8 | 44.7 | |

* The national average Normal Curve Equivalent score is 50.0.

TABLE 11
SCIENCE AND SOCIAL STUDIES
AVERAGE NCE SCORES FOR
DELAWARE SCHOOL DISTRICTS*
(Regular and Special Education Combined)

| District | Grade | Science | Social Studies |
|----------------|-------|---------|----------------|
| | | 11 | 11 |
| STATE | | 55.4 | 55.2 |
| Appoquinimink | | 48.5 | 51.5 |
| Brandywine | | 60.9 | 60.6 |
| Caesar Rodney | | 60.3 | 58.8 |
| Cape Henlopen | | 55.1 | 55.2 |
| Capital | | 58.3 | 56.9 |
| Christina | | 58.8 | 57.8 |
| Colonial | | 54.6 | 53.7 |
| Delmar | | 53.5 | 51.5 |
| Indian River | | 51.0 | 51.6 |
| Lake Forest | | 55.1 | 53.8 |
| Laurel | | 51.8 | 53.6 |
| Milford | | 51.9 | 51.9 |
| NCC Voc-Tech. | | 48.9 | 49.1 |
| Red Clay Cons. | | 55.3 | 55.6 |
| Seaford | | 56.8 | 56.9 |
| Smyrna | | 56.2 | 56.1 |
| Woodbridge | | 46.7 | 50.0 |

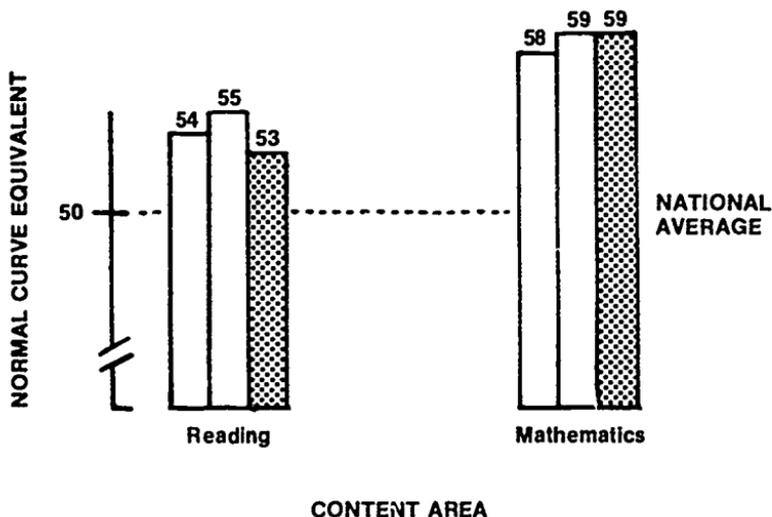
* The national average Normal Curve Equivalent score is 50.0.

THREE YEAR COMPARISON

HOW WELL DID WE DO IN CONTENT AREAS FROM 1984 TO 1986?

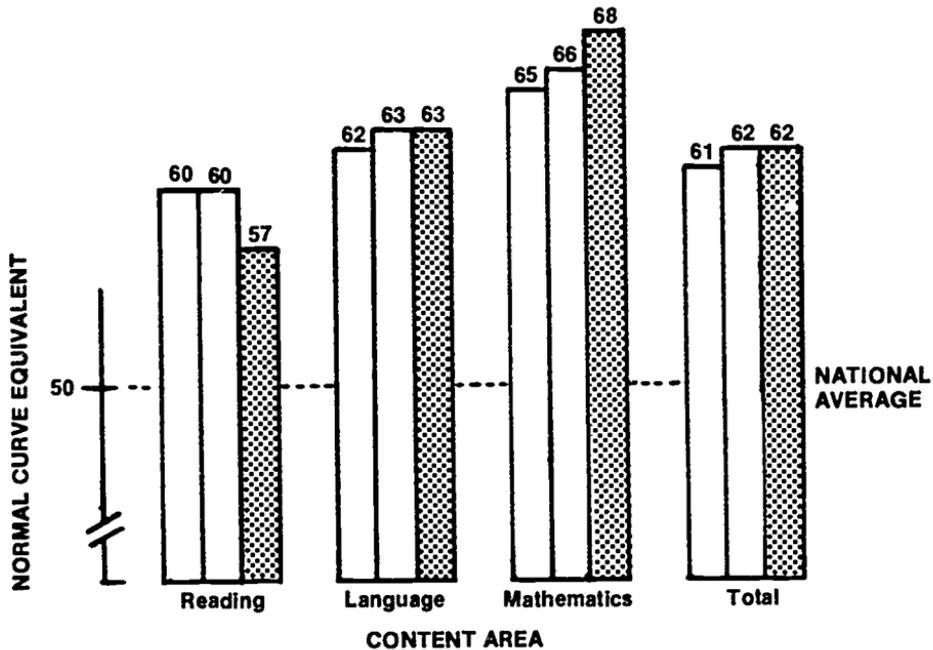
One of the important goals of the state assessment program is to monitor year-to-year achievement progress. The following graphs are provided for the benefit of those interested in making that comparison across the grades for 1984, 1985 and 1986. The score used is the Normal Curve Equivalent (NCE) score rounded to the nearest whole number. The national average is a NCE score of 50.0.

GRADE 1 (Regular and Special Education Combined)

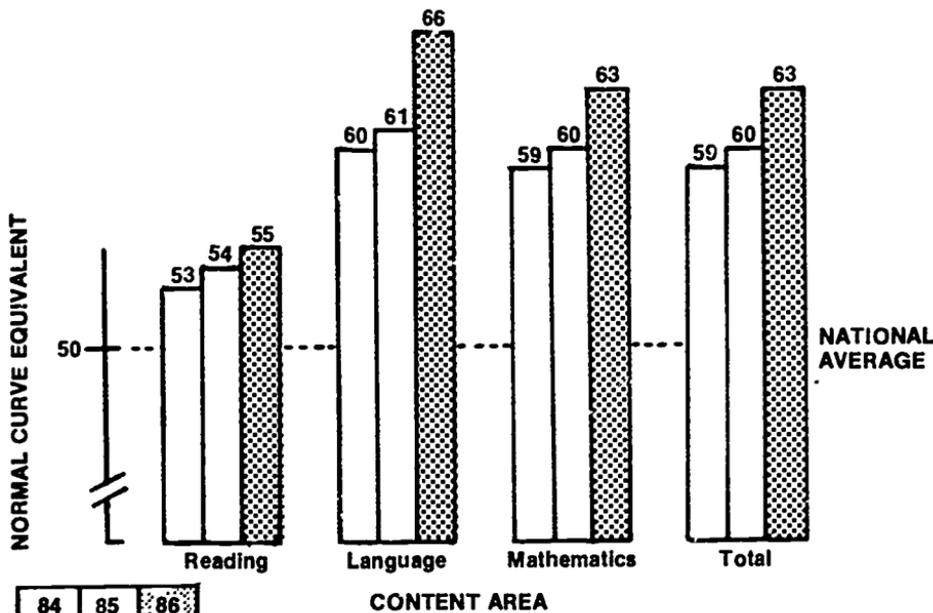


| | | |
|----|----|----|
| 84 | 85 | 86 |
|----|----|----|

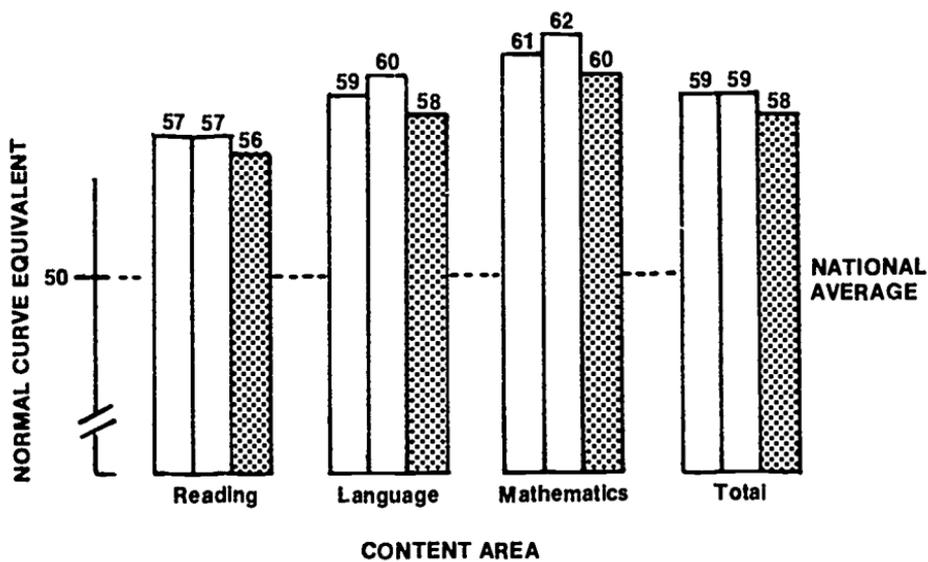
GRADE 2
(Regular and Special Education Combined)



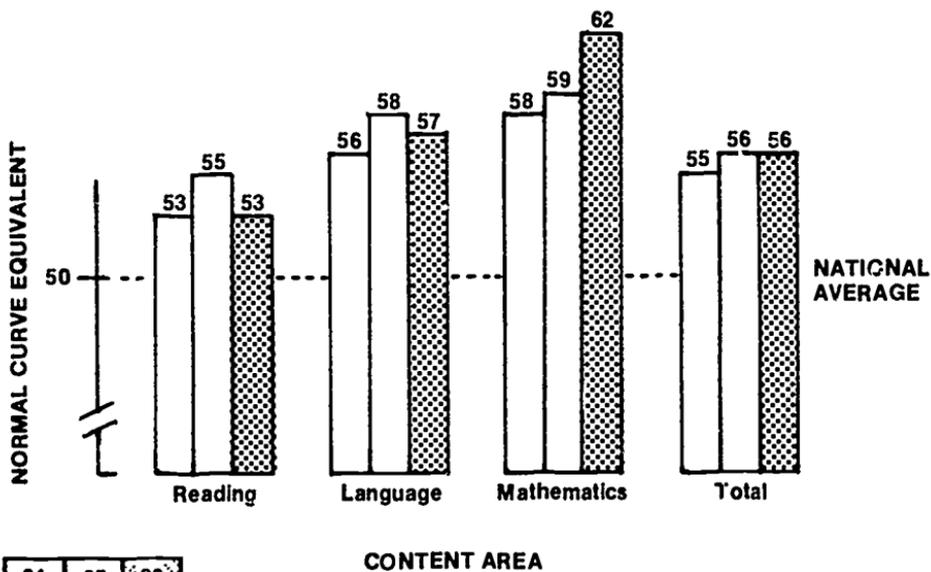
GRADE 3
(Regular and Special Education Combined)



GRADE 4
(Regular and Special Education Combined)

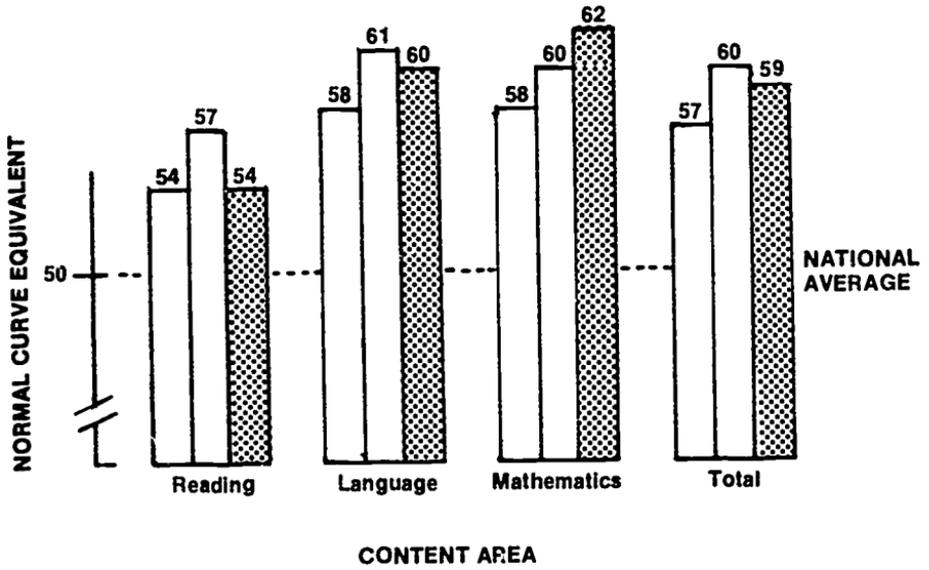


GRADE 5
(Regular and Special Education Combined)

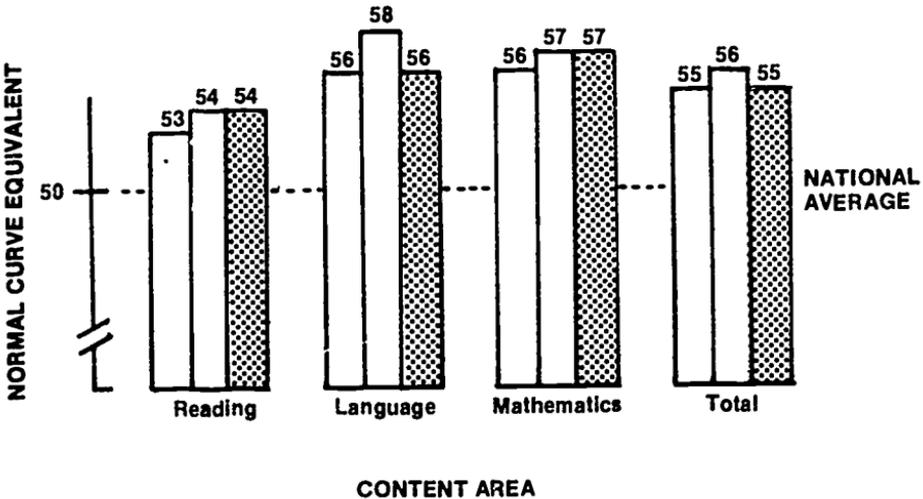


| | | |
|----|----|----|
| 84 | 85 | 86 |
|----|----|----|

GRADE 6
(Regular and Special Education Combined)

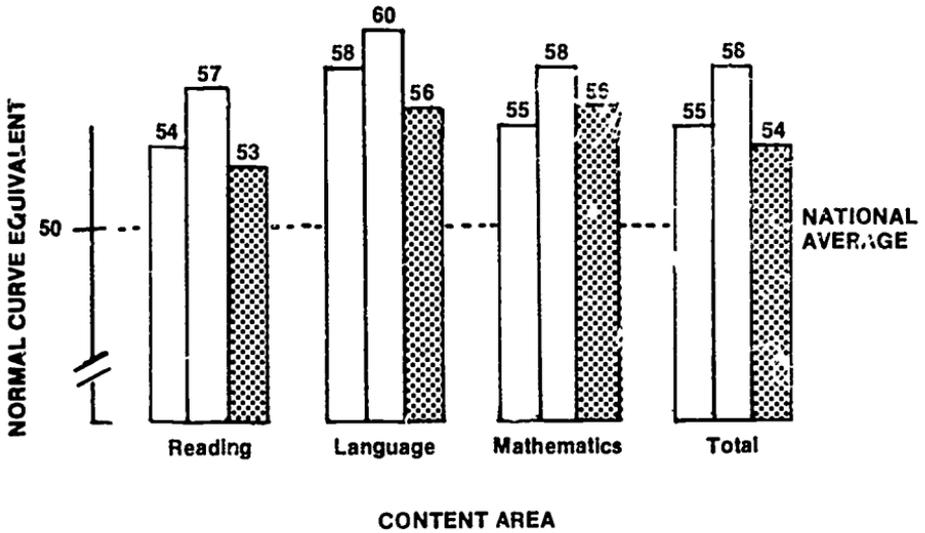


GRADE 7
(Regular and Special Education Combined)

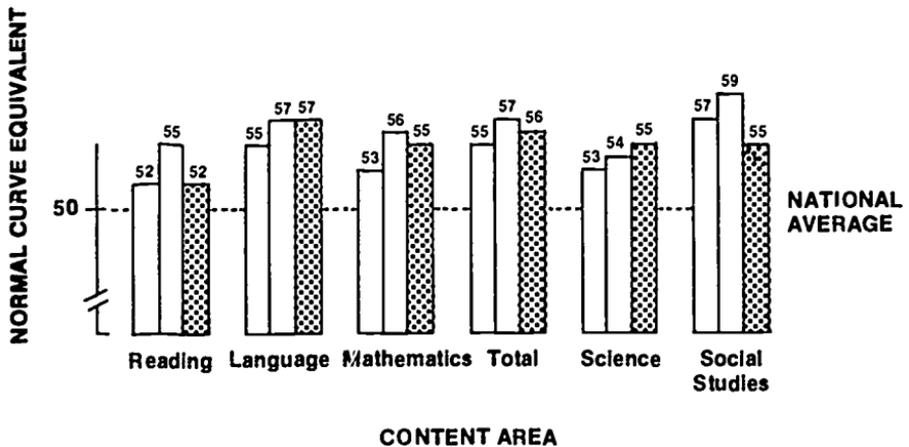


| | | |
|----|----|----|
| 84 | 85 | 86 |
|----|----|----|

GRADE 8
(Regular and Special Education Combined)



GRADE 11
(Regular and Special Education Combined)



| | | |
|----|----|----|
| 84 | 85 | 86 |
|----|----|----|

APPENDIX

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TABLE 12
PERCENT CORRECT*
READING
SPRING 1986
(Regular and Special Education Combined)

| Category Objective | Grades | | | | | | | | | |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--|
| | 1 DE/NAT | 2 DE/NAT | 3 DE/NAT | 4 DE/NAT | 5 DE/NAT | 6 DE/NAT | 7 DE/NAT | 8 DE/NAT | 11 DE/NAT | |
| WORD ATTACK | | | | | | | | | | |
| Initial Consonant | 91/86 | | | | | | | | | |
| Final Consonant | 83/74 | | | | | | | | | |
| Cluster/Digraph Words | 88/80 | 97/94 | | | | | | | | |
| Sight Words | 86/81 | 92/85 | | | | | | | | |
| Median Vowels | 70/62 | 80/68 | 80/59 | | | | | | | |
| Diphthongs/Variant Vowels | | 63/49 | 67/50 | | | | | | | |
| Syllables/Roots/Affixes | | 82/67 | 88/66 | | | | | | | |
| Compounds/Components | | 86/74 | 83/70 | | | | | | | |
| Contractions | | | 77/61 | | | | | | | |
| READING VOCABULARY | | | | | | | | | | |
| Oral Categories/Words | 70/59 | | | | | | | | | |
| Oral Definitions/Words | 82/74 | | | | | | | | | |
| Same Meaning | 71/60 | 80/67 | 74/68 | 74/64 | 67/61 | 76/71 | 65/60 | 72/67 | 67/67 | |
| Unfamiliar Words in Context | 78/68 | 83/73 | 88/80 | 80/74 | 80/72 | 88/81 | 71/61 | 78/69 | 75/73 | |
| Multimeaning Words | | | 78/68 | 79/69 | 62/56 | 71/66 | 62/57 | 70/65 | 65/58 | |
| Missing Words in Context | | | | 66/64 | 65/63 | 77/72 | 66/64 | 73/71 | 69/72 | |
| Meaning of Affixes | | | | 78/69 | 77/67 | 82/75 | 69/69 | 74/75 | 74/75 | |
| READING COMPREHENSION | | | | | | | | | | |
| Sentence Meaning | 83/78 | | | | | | | | | |
| Passage Details | 53/49 | 81/73 | 77/74 | 74/64 | 65/63 | 73/71 | 70/62 | 75/69 | 68/67 | |
| Character Analysis | 62/57 | 73/62 | 78/71 | 78/69 | 74/72 | 80/78 | 72/64 | 77/72 | 85/85 | |
| Main Idea | | 71/58 | 72/66 | 79/69 | 72/67 | 80/74 | 69/59 | 74/67 | 78/75 | |
| Generalizations | | 64/52 | 80/74 | 72/62 | 73/68 | 79/75 | 66/59 | 72/67 | 78/78 | |
| Written Forms | | | 85/56 | 75/62 | 70/65 | 78/72 | 63/54 | 70/62 | 68/64 | |
| Writing Techniques | | | | 78/72 | 53/51 | 63/58 | 67/64 | 73/72 | 69/65 | |

* This table shows the percent correct for students in Delaware (DE) compared to the percent correct for the students in the national sample (NAT).

TABLE 13
PERCENT CORRECT*
LANGUAGE
SPRING 1986
(Regular and Special Education Combined)

| Category Objective | Grades | | | | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| | 1 DE/NAT | 2 DE/NAT | 3 DE/NAT | 4 DE/NAT | 5 DE/NAT | 6 DE/NAT | 7 DE/NAT | 8 DE/NAT | 11 DE/NAT |
| LANGUAGE MECHANICS | | | | | | | | | |
| CAPITALIZATION | | | | | | | | | |
| Pronoun I/Nouns/Adjectives | | 81/62 | 84/63 | 79/71 | 79/65 | 82/69 | 59/51 | 65/56 | 72/64 |
| Beginning Words/Titles | | 90/76 | 92/76 | 72/54 | 56/42 | 63/48 | 59/57 | 64/62 | 62/62 |
| PUNCTUATION | | | | | | | | | |
| Period/Question Mark/ Exclamation Point/Comma | | 82/70 | 87/63 | 73/65 | 69/61 | 76/66 | 69/61 | 73/65 | 39/65 |
| Quotation Marks | | | | 69/52 | 71/62 | 79/69 | 84/72 | 87/76 | |
| Colon/Semicolon | | | | | | | | | 59/47 |
| PUNCTUATION AND CAPITALIZATION | | | | | | | | | |
| Editing Skills | | | | 76/64 | 73/64 | 80/69 | 59/56 | 63/61 | 72/65 |
| LANGUAGE EXPRESSION | | | | | | | | | |
| USAGE | | | | | | | | | |
| Nouns | 86/80 | 93/85 | 67/59 | 57/63 | | | | | |
| Pronouns | | 93/83 | 93/72 | 91/84 | 93/88 | 95/91 | 65/58 | 66/61 | 48/40 |
| Verbs | 69/60 | 81/72 | 92/82 | 86/78 | 74/69 | 78/74 | 78/72 | 81/76 | 75/72 |
| Adjectives/Adverbs | 78/69 | 85/73 | 88/67 | 87/77 | 75/72 | 82/77 | 81/71 | 85/76 | 89/84 |
| SENTENCE STRUCTURE | | | | | | | | | |
| Sentence Patterns | 84/76 | 93/82 | | | | | | | |
| Sentence Formation | 69/58 | 86/74 | 80/62 | 64/47 | | | | | |
| Sentence Recognition | | | | 79/65 | 81/69 | 86/74 | 82/65 | 85/71 | 70/60 |
| PARAGRAPH ORGANIZATION | | | | | | | | | |
| Sentence Combining | | | | 81/71 | 79/73 | 85/78 | 69/59 | 74/64 | 79/71 |
| Topic Sentence | | | | 69/56 | 63/54 | 71/60 | 65/50 | 71/56 | 78/66 |
| Sequence | | | | 77/65 | 75/68 | 62/73 | 70/62 | 76/68 | 73/69 |
| Clarity | | | | | 70/62 | 77/68 | 71/62 | 77/68 | 74/66 |
| Types of Writing Style | | | | | | | 69/57 | 76/64 | 69/63 |

* This table shows the percent correct for students in Delaware (DE) compared to the percent correct for the students in the national sample (NAT).

TABLE 14
PERCENT CORRECT*
MATHEMATICS
SPRING 1986
(Regular and Special Education Combined)

| Category Objective | Grades | | | | | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--|
| | 1 DE/NAT | 2 DE/NAT | 3 DE/NAT | 4 DE/NAT | 5 DE/NAT | 6 DE/NAT | 7 DE/NAT | 8 DE/NAT | 11 DE/NAT | |
| MATHEMATICS COMPUTATION | | | | | | | | | | |
| Add Whole Numbers | 78/72 | 90/78 | 81/68 | 75/68 | | | | | | |
| Add Decimals/Fractions | | | | 73/63 | 70/56 | 77/69 | 68/52 | 76/65 | 76/71 | |
| Subtract Whole Numbers | 83/80 | 91/80 | 74/62 | 76/68 | | | | | | |
| Subtract Decimals/Frac. | | | | 68/59 | 74/50 | 84/67 | 65/74 | 74/61 | 79/76 | |
| Multiply Whole Numbers | | | 81/67 | 77/67 | 77/62 | 85/77 | | | | |
| Multiply Decimals/Frac. | | | | | 55/50 | 69/63 | 60/44 | 71/56 | 67/59 | |
| Divide Whole Numbers | | | 80/62 | 74/64 | 74/61 | 84/77 | | | | |
| Divide Decimals/Frac. | | | | | | | 64/52 | 73/62 | 68/66 | |
| Integers | | | | | | | 37/36 | 53/46 | 70/57 | |
| Algebraic Expressions | | | | | | | | | 64/47 | |
| Exponents or Percents | | | | | | | | | 61/50 | |
| MATHEMATICS CONCEPTS AND APPLICATIONS | | | | | | | | | | |
| Numeration | 85/73 | 79/68 | | | | | | | | |
| Number Sentences | | | 80/70 | 75/65 | 72/59 | 61/53 | 62/53 | 71/64 | 76/75 | |
| Number Theory | | | 78/66 | 78/66 | 69/60 | 69/67 | 69/67 | 76/76 | 69/60 | |
| Problem Solving | 76/51 | 82/64 | 75/65 | 80/71 | 71/61 | 68/56 | 69/56 | 76/68 | 70/65 | |
| Measurement | | | 80/64 | 80/72 | 67/61 | 67/56 | 67/56 | 72/65 | 67/65 | |
| Geometry | | 81/64 | 82/69 | 81/69 | 70/62 | 58/54 | 58/54 | 65/65 | 52/46 | |
| Measurement/Geometry | 81/68 | 87/71 | 82/67 | 76/64 | 64/54 | 71/63 | 72/63 | 78/73 | 67/63 | |

* This table shows the percent correct for students in Delaware (DE) compared to the percent correct for the students in the national sample (NAT).

The complete report of the statewide testing program titled **DELAWARE EDUCATIONAL ASSESSMENT PROGRAM 1986 REPORT TO THE LEGISLATURE** will be available in November, 1986. It contains school, district and state results as well as analysis of strengths and weaknesses for each Delaware school district. To obtain a copy, contact the Planning, Research, and Evaluation Division of the Delaware State Department of Public Instruction, Townsend Building, Dover, DE 19903.