

A SURVEY OF CHANGES IN ACHIEVEMENT LEVELS OF NINTH-GRADE
PUPILS IN WASHINGTON COUNTY WHITE SCHOOLS, 1948 to 1958

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Washington County

Washington County, one of the smallest counties in the state population-wise, is located in Northwest Florida amid a mainly agricultural, dairy and beef cattle, and lumber and pulp-wood economy. During the past several years, the student population has been 3,000 students per year.

Washington County's testing program began in 1948, when during the pre-school conference, the administrators and teachers decided to administer a standardized achievement test to pupils in the junior high school grades. The Stanford Achievement Test was administered to pupils in grades 7-9, inclusive, early in November, 1948. Table 1 contains the results of the ninth-grade students on that test.

The use of the Stanford Achievement Test has given Washington County schools an objective evaluation of academic achievement for a period of ten years. All white ninth-grade students attending schools in Washington County constitute the population in the study. The ninth grade was chosen as the level of reporting progress in academic achievement during the ten-year period. Table 1 presents the mean ninth-grade achievement scores on all areas tested by the Stanford for the years 1948, 1956, and 1958. The table also presents gains in mean achievements between pairs of these years.

Since the equated scores on the 1940 edition and the 1953 edition of the Stanford Achievement Test do not have the same grade equivalent values, "Table 2, Total Grade Equivalents on Stanford Achievement Test, Forms J-N (1953 Edition) Corresponding to Equated Scores and Traditional Grade Equivalents on Stanford Achievement Test, Form D-H (1940 Edition)" has been used in arriving at the grade equivalents for the 1940 edition which was used in 1948.

These test results represent achievement level at the beginning of the school years 1948, 1956, and 1958. Test records indicate that pupils at the junior high level made about .2 grade-years higher on the Stanford in May than early in September of the next school year.

Table 1

Comparison of Achievement, Grade 9, 1948, 1956, and 1958

Year	P.M. ¹	W.M. ²	A.R. ³	Spell. ⁴	Lang. ⁵	A.R. ⁶	A.C. ⁷	A.A. ⁸	S.S. ⁹	Sci. ¹⁰	S.Sk. ^{11*}	B.M. ¹²
1948	7.5	7.5	7.5	7.9	7.5	8.5	7.6	8.1	6.7	6.7	...	7.5
1956	7.5	7.8	7.7	8.4	7.8	8.7	8.4	8.6	7.6	8.4	7.5	8.0
1958	8.5	8.8	8.7	8.9	8.5	9.5	9.6	9.6	8.4	9.2	8.0	8.8
Differences												
1948-56	0.0	0.3	0.2	0.5	0.3	0.2	0.8	0.5	0.9	1.7	...	0.5
1948-58	1.0	1.3	1.2	1.0	1.0	1.0	2.0	1.5	1.7	2.5	...	1.3
1956-58	1.0	1.0	1.0	0.5	0.7	0.8	1.2	1.0	0.8	0.8	0.5	0.8

- 1 Paragraph Meaning
 2 Word Meaning
 3 Average Reading
 4 Spelling
 5 Language
 6 Arithmetic Reasoning
 7 Arithmetic Computation
- 8 Average Arithmetic
 9 Social Studies
 10 Science
 11 Study Skills
 12 Battery Median
- * The 1948 edition of the Stanford Achievement Test did not contain a "Study Skills" section.

Observations

For the ten-year period, the overall academic achievement level of entering ninth-grade pupils has been raised from 7.5 to 8.8, a gain of 1.3 grade-years. The greatest gain was 2.5, which was in science. No area had a gain of less than 1.0 grade level over the ten year period. This suggests that there was substantial improvement in every area.

No intelligence test was administered to the entering ninth-grade students in 1948, but each subsequent ninth-grade group was administered such a test. Over the years, the range in which the median IQ's fell was 95 to 100. For the ninth-grade in 1956, the median IQ was 98; and in 1958, it was 99.

Factors Contributing to the Improvement in Academic Achievement. The writers believe that four factors largely contributed to the improvement in academic achievement; (a) consolidation of schools, (b) additional teacher training, (c) improvement of guidance services, and (d) improvement of reading ability of pupils. Each factor is described briefly below.

School Centers. In the fall of 1948, Washington County had twenty white school centers. An analysis of the results of the Stanford Achievement Test which was administered in November of 1948 showed the lowest academic achievement in the one-teacher schools, next to the lowest in the two-teacher schools, etc.

Since the pupil load per teacher has been approximately the same--28 in 1948, and 27.8 in 1958--and teaching personnel has changed very little, the low achievement in these schools is attributed to the fact that these teachers had to provide for so many recitations per day.

Three school centers now have classes large enough to have from two to four divisions per class. Only two centers are small enough to have more than one class per teacher, but these two centers enroll only 16 per cent of all pupils in grades 1-8, inclusive.

Table 2

Comparison of Number of School Centers,
Teachers, and Pupil Load, in 1948-49 and 1957-58

Type of School	1948-49	1957-58
One Teacher Schools, Grade 1-8	12	0
Two Teacher Schools, Grade 1-8	3	0
Three Teacher Schools, Grade 1-8	1	0
Four Teacher Schools, Grade 1-8	1	0
Five Teacher Schools, Grade 1-8	1	1
Six Teacher Schools, Grade 1-8	0	1
Twelve Teacher Schools, Grade 6-8	0	1
Seventeen Teacher Schools, Grade 1-8	1	0
Eighteen Teacher Schools, Grade 1-5	0	1
Twenty Teacher Schools, Grade 1-8	0	1
Twenty-five Teacher Schools, Grade 1-8	1	0
Pupil Enrollment	2,021	1,693
Teachers, Grade 1-8	72	61
Teacher Load	28.1	27.8

Teacher Training. In Table 3, one can observe that only 34.7% of Washington County teachers had as much as four years of college work in 1948, but that 93.4% of our teachers had had four years or more of college work in 1958.

Table 3

Comparison of Teacher Training--1948 and 1958

Year	Total No. of Teachers Grade 1-8	R A N K							
		I		II		III		IV or Lower	
		No.	%	No.	%	No.	%	No.	%
1948	72	0		0		25	34.7	47	65.3
1958	61	1	1.6	5	8.2	57	83.6	4	6.6

Furthermore, for in-service training, Washington County has followed a policy each year of choosing an area of the curriculum for special emphasis during that year. Consultants in the area being emphasized have been scheduled when possible to work with teachers during the pre-school and post-school conferences. In many instances, the same consultants conduct related extension courses during the school year.

Guidance Services. The administrative, supervisory, and instructional personnel of Washington County feel that standardized achievements tests are extremely useful in pointing out areas of strengths and weaknesses in academic achievement. When standardized test results come to the County Office, profiles are drawn by grade divisions and grade levels for the several school centers and by grade levels county-wide for the county office. These profiles always point out patterns of academic achievement by individual pupils, school centers, and county-wide. They are then passed on to the principals and teachers, and the areas in which academic achievement is lagging are pointed out to them; then the lagging areas receive special instruction and attention.

Improved Reading Skills. A developmental reading program was inaugurated in 1956 to improve the reading skills of high school students. At that time high school students on the average were retarded more than two grade levels. A reading consultant was asked to assist in the implementation of the program. A county committee, consisting mainly of English teachers from the two high school centers, served as the policy-making body and agreed on the following objectives:

1. Every teacher would be a teacher of reading.
2. Additional reading skills would be taught once a week to all pupils in the English classes using skill-building materials commensurate with each child's level of reading.

3. All teachers would guide children to reading more and better books from the library.

These objectives were followed quite closely by all high school teachers, and a phenomenal improvement was apparent after the first year of the program. This program, in a somewhat revised form, is still in operation in the County.

Summary

During a ten-year period, 1948 to 1958, the over-all achievement level, as measured by the Stanford Achievement Test, of entering ninth-graders in Washington County Schools was raised from 7.5 to 8.8, a gain of 1.3 grade-years. The greatest part of the gain was made during the latter two years, 1956 to 1958--eight of the thirteen months' gain was made during these two years.

Four factors largely contributed to the improvement in academic achievement in the opinion of the writers. They are consolidation of schools, additional teacher training, improvement of guidance services, and improvement of reading ability of pupils.