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# A Comparison of the Scott-Foresman Measured Reading Achievement of the Three High and Low Socioeconomic Elementary Schools in Vancouver, Washington

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A COMPARISON OF THE SCOTT-FORESMAN MEASURED READING  
ACHIEVEMENT OF THE THREE HIGH AND LOW  
SOCIOECONOMIC ELEMENTARY SCHOOLS  
IN VANCOUVER, WASHINGTON

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A Thesis  
Presented to  
the Graduate Faculty  
Central Washington State College

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Education

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by  
Leann G. Nolan  
August, 1969

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Harry S. Sutherland

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## Chapter 1

### THE PROBLEM AND DEFINITION OF TERMS USED

Educators support the concept of teaching the whole child and are aware of the many factors of his total being that help determine his progress or deficiencies. Intelligence has long been recognized as a determinant of reading achievement; but personal, social, and emotional factors also have an effect upon the degree or scope of achievement attained. Teachers must probe into all of the influences which may affect the reading achievement of each child if they are to meet individual needs.

One of the influences upon reading achievement is that which is exerted by the home. It is known that "emotional, social and economic factors in the home conditions the child's preschool experiences, and from this development, personality emerges" (1:152). It could then be assumed that a student's school experiences and achievement would be conditioned by home influences.

There are indications that the high socioeconomic level student will achieve a higher level of reading progress as compared to the lower socioeconomic student.

Riden, in a study of eight-year-olds, found that the

. . . mean reading quotient was higher in good residential areas than in poor areas. The degree of culture was significantly correlated with reading in the poor residential area where standards of home culture were low. There was little or no relationship between these factors in good residential areas where cultural standards were high. This finding implies that the school may need to do much to overcome the cultural limitation of the home (15:225-226).

Thus, the higher socioeconomic background would indicate higher measured reading achievement; the low socioeconomic background would indicate lower measured reading achievement. If it is the task of the school to overcome cultural limitations of the school children, then teachers need to know the extent of socioeconomic influences upon reading achievement. It was within this framework that the study was begun.

## THE PROBLEM

### Statement of the Problem

The problem in this investigation was to determine the influences of the high and low socioeconomic backgrounds upon reading achievement in the Vancouver (Washington) Public Elementary Schools. The investigator wanted to determine if the generally accepted premise that the higher socioeconomic level student's reading achievement is greater than that of the lower socioeconomic student would be substantiated in the specific area of Vancouver, Washington.

The null hypothesis to be tested: There will be no differences in the measured reading achievement of students coming from the high and low socioeconomic elementary schools in Vancouver, Washington.

### Justification for the Study

One of the most persistent problems for educators is that of providing for individual differences among children. The task of helping each child develop to his fullest capabilities in reading is a continual challenge. There is a need to gain a better understanding of the factors which may influence reading achievement. How does the high and low socioeconomic background affect measured reading achievement among elementary school children?

It is the purpose of this study to determine if the high and low socioeconomic levels affect the measured reading achievement of children in a selected school district. This study may indicate that adjustments need to be made in the reading instructional program. One such adjustment could be in the area of reading methodology in the schools.

Chall states:

- a. Children of low average and average intelligence and children of lower socioeconomic background probably learn better in the end with a "code emphasis" than with meaning emphasis, although this advantage does not show immediately.
- b. Children of high mental ability and children of middle high socioeconomic backgrounds appear to gain an immediate advantage from a "code emphasis." However, because they are bright they are usually better able to discover sound-letter relationships for themselves. Thus, the differences between results

from a meaning or a "code emphasis" are probably not ultimately as great for them as for the average and for the child of lower socioeconomic background (3:138).

### Limitations

This investigation had the following limitations:

1. This study involved six schools within the Vancouver, Washington, Elementary School District. Three of the schools were located in what is considered the higher socioeconomic level of the district. The remaining three schools were located in the lower socioeconomic area.
2. The findings were based on the reading achievement of students in grades one through six as measured by the level of the 1962 edition of the Scott-Foresman basal reading text completed at the end of each year.
3. The socioeconomic level of the three higher and lower schools was determined by the Vancouver, Washington, School District survey. The survey considered the numbers of children living in families which receive "aid to dependent children" and those families of four members which are considered below a three thousand dollar annual income as indicators of lower socioeconomic level.
4. There was a greater number of students from the three low socioeconomic schools than from the three high socioeconomic schools included in the study.

## DEFINITIONS OF TERMS USED

Socioeconomic Background

Sims stated that the socioeconomic background is "the general cultural, social, and economic background furnished by the home" (17:2). According to Webster's Seventh New Collegiate edition, socioeconomic background may be a person's total experience, knowledge, and education which was determined by a combination of social and economic factors (19).

Reading Achievement Level

This term referred to the level of the Scott-Foresman basal reading text (1962 edition) completed by a student at the end of each school year.

Reading Grade Level

This is the term used by the Scott-Foresman Book Company to refer to the grade level of each reading text.

## Chapter 2

### REVIEW OF RELATED RESEARCH

#### IMPORTANCE OF SOCIOECONOMIC BACKGROUND

Every child is a product of his environment which includes his home, friends, school, activities, and every experience. Each home is unique in its attitudes, relationship, personalities, and atmosphere. When a child comes to school he brings his early home influence with him. The child reacts in terms of his previous learnings in accordance with the socioeconomic background of the home.

The term socioeconomic background is given exact meaning by Sims as the "general cultural, social, and economic background furnished by the home" (17:2). Because no two homes could possibly have the same exact environmental and socioeconomic background, then it could be assumed that no two children are equal in response or achievement as conditioned by environment.

According to Havighurst, an understanding of the American social class pattern is necessary for effectiveness of teaching. He reports that various social anthropologists studying the subcultures of America have reached agreement that in terms of influence on the child, socioeconomic background is one of the most significant. Even though there are individual

personality differences, the cultural likenesses are similar within each social class. Social mobility has been an element of American democracy. The teacher who recognizes existing cultural differences can assist and motivate the able culturally disadvantaged child to raise himself to high standards of achievement. Such teaching would include the middle class values and the opportunities through education to achieve a higher occupational status than that of the low socioeconomic status parent (10:100-105).

In many respects the schools are geared to the middle class patterns to the point that most teachers are from the middle class. This fact has not raised the status of the less-privileged child. These children usually are less proficient in language, lower in measured intelligence, leave school early, have more adjustment problems, and are less interested in school. Self-concepts are low; thus, they frequently do not aspire to high levels of achievement (7:285).

Able children cannot always be recognized through intelligence tests alone. Masland and others summarized that differences among school children found in studies based on intelligence tests are believed to result from several factors--differences in experience with the particular types of problems that make up the test, differences in motivation to do one's best on the tests, and possible differences in experience during the pre-school years. Therefore, a knowledge of variations in socioeconomic standards and values could be meaningful in the teaching of reading (14:3).

Davis stated that according to intelligence tests used, lower socioeconomic background children at the ages of six to ten had an average intelligence of eight to twelve points lower than the average intelligence of the high socioeconomic group. Children of the low socioeconomic level at age fourteen had an average intelligence that was twenty to twenty-one points lower than the high socioeconomic group. He continued to state sound statistical evidence that "real" intellectual capacity was generally the same for all socioeconomic groups when cultural factors were controlled. Cultural deficit had a natural result of grouping numbers of lower socioeconomic level children with low intelligence scores into slow moving classes. The outcome of the grouping was then low achievement (6:10-16).

Masland points out that class differences are minimally related to intelligence test performance at the first-grade level, but that the relationship increases in the later grades. One partial explanation for this may be that for the middle-class child, school represents an experience continuous with his home environment. Whereas, for the low socioeconomic level child school is discontinuous with his home; thus he becomes more and more alienated from school and school achievement (14:3).

Havighurst and Neugarten view the school as a selecting and sorting agency on two characteristics: (1) the child's ability and (2) his social class background. There is a tendency to treat children of higher

intelligence differently from those of lower intelligence which tends to keep those of higher ability in school for a longer period. At the same time, the system seems to allow many of the lower socioeconomic levels, including some of high ability, to drop out of school early. This treatment in relation to social class is not meant to be intentional, but results primarily from the cultural differences between social classes (11:237).

It would seem from this brief survey that socioeconomic background has been recognized as an important aspect of life and should be regarded as an important factor related to scholastic achievement.

#### RELATIONSHIP OF SOCIOECONOMIC BACKGROUND AND READING ACHIEVEMENT

In 1962, Peter Rossi conducted a survey of research studies on social factors which affect the student's achievement in American elementary and high schools. One of the major findings indicated that student's intelligence related more strongly to his achievement level than to any other characteristic. Yet, despite the importance of intelligence, a considerable portion of the differences among individuals was accounted for in other terms. Rossi continued by stating,

Part of the remaining variation is taken up by socioeconomic status, the higher the occupation of the breadwinner in the student's family, the greater his level of achievement (16:269).

As a part of the total achievement, reading may be related to the occupation of the breadwinner of the family.

A study was conducted by Hilliard and Troxell with two groups of first-grade pupils of differing socioeconomic backgrounds. The subjects were compared on amount of information acquired, reading readiness, and progress in reading. They did not differ significantly in intelligence. However, the high socioeconomic group was significantly higher in reading readiness than the low socioeconomic group and achieved six months above the norm in second grade reading. In contrast, the low socioeconomic group achieved one month below the norm in second grade reading (12:225-263).

Gough also found a significant difference in favor of a high socioeconomic group of sixth graders in vocabulary, reading, and intelligence when mean scores were compared with those of a lower socioeconomic group (9:527-540).

A study to determine whether reading prognosis tests could be conducted to measure future reading ability based on present skills and knowledge of children from different socioeconomic levels was done by Weiner and Feldman. They devised a test that attempted to measure global skills that would yield a predictive reading score. However, that test did not measure a differentiation among the child's known skills. The socioeconomic level was determined by the occupation of the adult member of the family, number of rooms in the home per occupant, and the educational level of adult members. The test was administered at the beginning of kindergarten and the first grade. The researchers concluded that poor

readers from differing socioeconomic levels can be identified before formal training in reading takes place. Skill deficiencies underlying reading could be ascertained. The study recognizes that experiences with socioeconomic levels tend to differentiate potential reading achievement. This also seems to substantiate that there are differing experiences according to the child's socioeconomic background (18:807-809).

James Duggins states that research tells how the low socioeconomic child feels about themselves and others, what their parents earn, and what type of reading habits the parents possess. In many cases, the lower socioeconomic levels are poor readers, they lag behind peers in language arts, speaking, listening, and writing. It is estimated that 70 to 80 percent of the students in great city schools are poor readers, the basic problem being social differences (7:284).

The studies listed above indicated that there are different levels of reading achievement evidence by socioeconomic background. To date little research has been conducted to study basal reading programs and their relationship to children coming from varying socioeconomic backgrounds. The investigator was unable to cite any specific examples.

## Chapter 3

### PROCEDURES OF INVESTIGATION

The plan of this study was to compare the reading achievement of the three high and low socioeconomic elementary schools in Vancouver, Washington.

### SAMPLE

The population for this study came from the sixteen Vancouver (Washington) Elementary Schools. The sample was determined by a 1967 school district survey which ranked the elementary schools according to the number of children receiving "aid to dependent children" and the number of families with four or more members that receive less than three thousand dollars annual income. Because the socioeconomic levels of the elementary schools did not alter considerably for the 1963-68 years considered in the study, the investigator chose to accept the 1967 survey in determining the three highest and the three lowest socioeconomic level schools of Vancouver. The three extreme high and low socioeconomic elementary schools of the specific area might best illustrate any socioeconomic differences and their effects on reading achievement.

## SOURCES OF DATA

The reading achievement of the students included in the study was measured according to the level of book completed in the 1962 edition of the Scott-Foresman basal reading program. The Vancouver Elementary Schools conducted an annual survey of the reading achievement of all students in grades one through six. At the completion of each school year all classroom teachers recorded the grade levels of the books that students had completed. A composite form of the reading achievement levels of students from each of the sixteen elementary schools was compiled. Through the cooperation of the Vancouver Schools, the investigator was able to obtain the reading achievement composites of the three high and the low socioeconomic schools included in the study.

## PERIOD OF STUDY

A period covering years 1963-1968 was chosen for the following reasons: (1) adequate data could be obtained for the six-year period, and (2) the 1962 edition of the Scott-Foresman basal reading texts had remained constant.

## METHODS OF PROCEDURE

The data was presented in percentages. Since the totals of students varied each year for each of the chosen schools, percentages

were assumed to best reflect the amount of differences. The data was grouped into four categories:

- I. Reading at grade level or above
- II. Reading one-half of a year below grade level
- III. Reading one year below grade level
- IV. Reading more than one year below grade level

Grouping the data in the four categories would yield a more specific view of the reading levels of achievement among the students coming from the three high and low socioeconomic schools within Vancouver. Percentages of high and low socioeconomic school students in all grades 1 through 6, reading at the four levels of achievement, would be computed for the 1963-1968 period. The tables would then show comparisons of the high and low socioeconomic schools' reading achievement.

To provide further comparisons of the three high and low socioeconomic schools reading achievement, a z test was employed. This test was used to examine the differences between the high and low socioeconomic school students reading at Levels I-IV. The formula is:

$$z = \frac{p_1 - p_2}{\tilde{\sigma}_{p_1 - p_2}}$$

$$\tilde{\sigma}_{p_1 - p_2} = \sqrt{\frac{p_1(1-p_1)}{n_1 - 1} + \frac{p_2(1-p_2)}{n_2 - 1}} \quad (2:261)$$

Alpha was set at .05 level of significance for this study.

## Chapter 4

### ANALYSIS OF THE DATA

In the presentation of the data, the discussion has been separated into three parts:

1. The 1963-1968 comparisons of each reading achievement level I-IV of the students coming from the three high and low elementary schools. Each reading Level I-IV will illustrate the 1963-1968 yearly percentages of students from the three high and low socioeconomic schools.

2. The 1963-1968 comparisons of all four reading achievement Levels I-IV of the students from the three high and low socioeconomic elementary schools. Tables for these years (1963-1968) will indicate percentages of all reading achievement Levels I-IV of students from the three high and low socioeconomic schools.

3. A comparison of reading achievement Levels I-IV of students from the three high and low socioeconomic elementary schools for the years 1963-1968.

#### COMPARISONS OF EACH READING ACHIEVEMENT LEVELS I-IV OF THE STUDENTS FROM THE THREE HIGH AND LOW SOCIOECONOMIC ELEMENTARY SCHOOLS

Students from the three high and low socioeconomic elementary

schools reading at grade level or above--Level I--are illustrated in

Table 1.

Table 1. Level I Reading Achievement of the Three High and Low Socio-economic Elementary Schools in Vancouver, Washington.

Year	<u>High Socioeconomic Schools</u>			<u>Low Socioeconomic Schools</u>		
	Students at Level I	Total Students	Per Cent	Students at Level I	Total Students	Per Cent
1963	659	808	82	728	1173	62
1964	659	804	82	776	1300	60
1965	669	880	76	499	952	52
1966	784	996	79	598	996	60
1967	677	931	72	760	1408	60
1968	715	1035	69	780	1406	55

The high socioeconomic schools had 82 percent for year 1963 and a decrease to 69 percent in 1968 of their students reading at Level I. Also, the low socioeconomic schools had a high of 62 percent in 1963 with a decrease to 60 percent in 1968 of their students reading at Level I. Thus, there was a greater percent of students in the high socioeconomic schools that were reading at grade level or above as compared to the low socioeconomic schools' students. Concurrently, there was also a decrease for the years 1963-1968 in the percentages of students reading at Level I for both the high and low socioeconomic schools.

The students from the three high and low socioeconomic elementary schools reading one-half of a year below grade level--Level II--are shown in Table 2.

Table 2. Level II Reading Achievement of the Three High and Low Socio-economic Elementary Schools in Vancouver, Washington.

Year	<u>High Socioeconomic Schools</u>			<u>Low Socioeconomic Schools</u>		
	Students at Level II	Total Students	Per Cent	Students at Level II	Total Students	Per Cent
1963	90	808	11	234	1173	20
1964	97	804	12	265	1300	20
1965	164	880	19	231	952	24
1966	132	996	13	198	996	19
1967	192	931	20	270	1408	19
1968	248	1035	24	365	1406	26

The total range of percentages of students reading at Level II for the high socioeconomic schools progressed from 11 to 24 percent as compared to 20 to 26 percent in the low socioeconomic schools. This indicated an increase among both high and low socioeconomic schools' students reading one-half of a year below grade level during the 1963-1968 period. In the years 1963-1966 and 1968 the high socioeconomic schools had a smaller percentage of readers at Level II than the low socioeconomic schools. One exception occurred in the year 1967, for high socioeconomic

schools had 1 percent more students at Level II than the low socioeconomic schools. An analysis of the data failed to reveal any reason for the variance.

The three high and low socioeconomic schools' students reading one year below grade level--Level III--are reported in Table 3.

Table 3. Level III Reading Achievement of the Three High and Low Socioeconomic Elementary Schools in Vancouver, Washington.

Year	<u>High Socioeconomic Schools</u>			<u>Low Socioeconomic Schools</u>		
	Students at Level III	Total Students	Per Cent	Students at Level III	Total Students	Per Cent
1963	22	808	3	141	1173	12
1964	39	804	5	174	1300	13
1965	36	880	4	129	952	14
1966	57	996	6	113	996	11
1967	45	931	5	234	1408	17
1968	30	1035	3	89	1406	6

For each year 1963-1968 at Level III the low socioeconomic schools had a greater percent of students than the high socioeconomic schools. Therefore, the low socioeconomic schools had more students reading a year below grade level than the high socioeconomic schools.

The percentages of students from the three high and low socioeconomic elementary schools reading more than a year below grade level--Level IV--are illustrated in Table 4.

The percentages of readers in the high socioeconomic schools were less than the percentages of readers in the low socioeconomic schools at Level IV. Thus, the low socioeconomic schools had a greater percentage of readers more than a year below grade level than the high socioeconomic schools for all the years of 1963-1968.

Table 4. Level IV Reading Achievement of the Three High and Low Socioeconomic Elementary Schools in Vancouver, Washington.

Year	<u>High Socioeconomic Schools</u>			<u>Low Socioeconomic Schools</u>		
	Students at Level IV	Total Students	Per Cent	Students at Level IV	Total Students	Per Cent
1963	22	808	3	70	1173	6
1964	9	804	1	85	1300	7
1965	11	880	1	93	952	10
1966	23	996	2	87	996	8
1967	17	931	2	144	1408	10
1968	30	1035	3	89	1406	6

1963-1968 COMPARISONS OF ALL READING ACHIEVEMENT LEVELS I-IV  
OF THE STUDENTS FROM THE THREE HIGH AND LOW  
SOCIOECONOMIC ELEMENTARY SCHOOLS

The 1963-1968 yearly percentages of students reading at all Levels I-IV for the three high and low socioeconomic elementary schools are shown in Tables 5 through 10, on the following pages. As shown in Tables 5 through 10, during the years of 1963-1968 the high socioeconomic

Table 5. 1963 Reading Achievement Levels I-IV of the Three High and Low Socioeconomic Elementary Schools in Vancouver, Washington.

Reading Level	<u>High Socioeconomic Schools</u>		<u>Low Socioeconomic Schools</u>	
	Students	Percent	Students	Percent
I	659	82	728	62
II	90	11	234	20
III	37	4	141	12
IV	22	3	70	6

Table 6. 1964 Reading Achievement Levels I-IV of the Three High and Low Socioeconomic Elementary Schools in Vancouver, Washington.

Reading Level	<u>High Socioeconomic Schools</u>		<u>Low Socioeconomic Schools</u>	
	Students	Percent	Students	Percent
I	659	82	776	60
II	97	12	265	20
III	39	5	174	13
IV	9	1	85	7

Table 7. 1965 Reading Achievement Levels I-IV of the Three High and Low Socioeconomic Elementary Schools in Vancouver, Washington.

Reading Level	<u>High Socioeconomic Schools</u>		<u>Low Socioeconomic Schools</u>	
	Students	Percent	Students	Percent
I	669	76	499	52
II	164	19	231	24
III	36	4	129	14
IV	11	1	93	10

Table 8. 1966 Reading Achievement Levels I-IV of the Three High and Low Socioeconomic Elementary Schools in Vancouver, Washington.

Reading Level	<u>High Socioeconomic Schools</u>		<u>Low Socioeconomic Schools</u>	
	Students	Percent	Students	Percent
I	784	79	598	60
II	132	13	198	20
III	57	6	113	11
IV	23	2	87	9

Table 9. 1967 Reading Achievement Levels I-IV of the Three High and Low Socioeconomic Elementary Schools in Vancouver, Washington.

Reading Level	<u>High Socioeconomic Schools</u>		<u>Low Socioeconomic Schools</u>	
	Students	Percent	Students	Percent
I	677	73	760	54
II	192	20	270	19
III	45	5	234	17
IV	17	2	144	10

Table 10. 1968 Reading Achievement Levels I-IV of the Three High and Low Socioeconomic Elementary Schools in Vancouver, Washington.

Reading Level	<u>High Socioeconomic Schools</u>		<u>Low Socioeconomic Schools</u>	
	Students	Percent	Students	Percent
I	715	69	780	55
II	248	24	365	26
III	42	4	172	12
IV	30	3	89	7

schools had a greater percentage of students reading at grade level (Level I) and a smaller percentage of students reading below grade level (Levels II-IV) compared to the low socioeconomic schools. Conversely, the low socioeconomic schools had a smaller percentage of students reading at grade level and a greater percentage of students reading below grade level than the high socioeconomic schools. One variation to the above was shown in 1967 (Table 9, page 22), when the high socioeconomic schools had 1 percent more students reading one-half year below grade level than the low socioeconomic schools.

A COMPARISON OF ALL READING ACHIEVEMENT LEVELS I-IV  
OF STUDENTS FROM THE THREE HIGH AND LOW  
SOCIOECONOMIC ELEMENTARY SCHOOLS

Table 11, page 24, lists the arithmetic means of Tables 5-10. In Table 11, the arithmetic means of percentages were computed for the 1963-1968 reading Levels I-IV for the three high and low socioeconomic schools' students. These averages indicated a greater percentage of students from the high socioeconomic schools were reading at grade level and above (Level I) than the percentage of students from the low socioeconomic schools. Also, a greater percentage of students from the low socioeconomic schools were reading below grade level (Levels II-IV) than the percentage of students from the high socioeconomic schools.

Table 11. 1963-1968 Average Reading Achievement Levels I-IV of the Three High and Low Socioeconomic Elementary Schools in Vancouver, Washington.

Reading Levels	High Socioeconomic Schools		Low Socioeconomic Schools		$\underline{z}^*$
	Students	Percent	Students	Percent	
I	4163	75	4141	57	16.37
II	923	17	1563	22	- 3.12
III	256	5	963	10	- 2.98
IV	112	3	568	9	- 3.00

\* .05  $\underline{z} = 1.96$

For the three high and low socioeconomic schools, a pattern became evident, as shown in Table 11. There was a decrease in student percentages for both the high and low socioeconomic schools when comparing reading achievement Levels I-IV. It was shown that the greatest percentage of high and low socioeconomic schools' students were reading at grade level (Level I) to the least percentages of students reading more than a year below grade level (Level IV).

A  $\underline{z}$  test was used to compare the differences of the three high and low socioeconomic schools' students reading at Levels I-IV. The  $\underline{z}$  scores of 16.35, -3.12, -2.98, and -3.00 were found for reading Levels I-IV, respectively. All the  $\underline{z}$  scores were significant at the .05 level.

## Chapter 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### SUMMARY

The study was designed to indicate reading achievement differences among the three high and low socioeconomic level elementary schools within Vancouver, Washington. Reading achievement was based on the level of each book completed in the Scott-Foresman basal reading program 1962 edition. The three high and low socioeconomic schools were determined by a school survey which considered the numbers of "aid to dependent children" and families earning less than three thousand dollars per annual income. Percentages of three high and low socioeconomic schools' students in all grades one through six reading at four levels of reading achievement were compiled in tabulated form for the years 1963-1968.

A z test was used to compare the reading achievement levels I-IV of students from the three high and low socioeconomic schools. The results of the test were significant at the .05 level. A closer analysis of the data evidenced a greater percentage of high socioeconomic schools students in grades one through six reading at grade level than students from the three low socioeconomic schools. Conversely, a higher percentage of the low socioeconomic schools' students read below grade level than did the

high socioeconomic schools' students. Two additional findings seemed notable. First, in both the high and low socioeconomic schools the percentages of grade level readers had decreased for the 1963-1968 period. Secondly, the percentages of students in both the high and low socioeconomic schools that were reading below grade level had increased for the 1963-1968 period.

### CONCLUSIONS

The findings of the study indicated differences in the measured reading achievement of students coming from the three high and low socioeconomic elementary schools in Vancouver, Washington. Therefore, the null hypothesis which stated there would be no differences in the measured reading achievement of students coming from the high and low socioeconomic schools of Vancouver, Washington, would be rejected. Three conclusions concerning the schools included in this study were drawn from this investigation:

1. There were differences in the measured reading achievement of the high and low socioeconomic elementary schools of Vancouver.
2. The greater percentage of high socioeconomic schools' students reading at grade level than the low socioeconomic schools' students indicated a greater level of measured reading achievement in the high socioeconomic schools. Conversely, the low socioeconomic schools

students reading achievement was not as great as the high socioeconomic schools' students.

3. Both the high and low socioeconomic schools' percentages of students reading at grade level had decreased, whereas the percentages of students reading one-half a year below grade level had increased for the 1963-1968 period.

### RECOMMENDATIONS

Why did the three high socioeconomic elementary schools have a greater percentage of readers at grade level and a smaller percentage of readers below grade level than the three low socioeconomic elementary schools? What factors have caused a decrease in the percentages of students reading at grade level in the three high and low socioeconomic elementary schools? These are inquiries which the Vancouver School District need to examine.

The study indicated a need for an analysis of the present reading program. The Scott-Foresman basal reading text was for the most part the elementary instructional reading program. Basically, the 1962 Scott-Foresman text edition emphasizes reading for meaning (3:252). Recent research has been conducted in order to indicate clues to teaching children of varying socioeconomic backgrounds. Daniels and Diack in 1956 and 1960 noted that stronger phonics in the beginning reading program is more beneficial than moderate phonics for children of low socioeconomic

backgrounds. They found this to be the case in their 1956 study of retarded readers and in their 1960 study of infant school children (5:130).

Another relevant study was concerned with the effectiveness of "formal" and "informal" approaches to phonics. Working with children ages six to seven, Gardner suggested the "informal" approach was more effective in schools with large proportions of children from a high socioeconomic background and of high mental ability. For children from poor homes who were mentally younger, the "formal" phonics (which generally had more direct instruction in the mechanics of reading) produced better results in reading at age seven (8:131).

According to Chall, limited experimental evidence seems to indicate that a heavier code emphasis would be more effective in teaching low socioeconomic children to read (3:254).

The role of a basal reader may best be developed into a flexible pattern. The teacher may incorporate the advantages of both group and individualized instruction with the use of the basal reader and additional reading materials. The basal could be used as a guide for an efficient plan of assuring the acquisition of basic reading skills. Supplementary reading materials with the basal might best assist those students which need more diversified approaches to reading skill areas. In this way teachers may adjust reading materials to the group and individual needs of students coming from varied socioeconomic backgrounds.

The results of this study have shown that there were differences in the reading achievement of the three high and low socioeconomic elementary schools' students of Vancouver, Washington. The conclusion has led the investigator to recommend further study to examine:

1. The reading achievement of a group of high and low socioeconomic level students reading with a more linguistic-phonics oriented program as compared to another group of high and low socioeconomic students using a Scott-Foresman basal text. The results of this study may reflect the effectiveness of a reading program to be used for students of varying socioeconomic backgrounds.

2. A wealth of additional reading materials to supplement the basal text. Possibly, a study could be designed to examine the effectiveness of a basal program and a basal with supplementary reading materials program with students of varying socioeconomic backgrounds.

3. The possible factors which may have caused a decline in the percentages of students of both the three high and low socioeconomic schools reading at grade level or above and an increase in the percentage of students reading one-half a year below grade level.

4. The future effects of reading achievement in relationship to students of varying socioeconomic backgrounds in Vancouver. The study may need to include all elementary schools in addition to the schools included in the study.

5. The fact that there was a greater number of students from the three low socioeconomic schools as compared to the three high socioeconomic schools. Factors such as pupil-teacher ratio and school facilities may need to be investigated for possible effects on the student's reading achievement.

6. Reading test scores as a method of assessing the level of students' reading achievement in terms of skill development. This study had "filed" children in terms of books completed.

7. Any possible factors which have caused differences in the reading achievement of the three high and low socioeconomic elementary schools' students of Vancouver, Washington.

## BIBLIOGRAPHY

1. Betts, Emmett A. Foundations of Reading Instruction. New York; American Book Company, 1957.
2. Bloomers, Paul, and E. F. Lindquist. Elementary Statistical Methods in Psychology and Education. Boston: Houghton Mifflin Company, 1960.
3. Chall, Jeanne. "Different Approaches to Beginning Reading," Reading As An Intellectual Activity, J. Allen Figurel, editor. International Reading Association Conference Proceedings, 8, 1963, p. 254.
4. \_\_\_\_\_. Learning to Read: The Great Debate. New York: McGraw-Hill Company, 1967.
5. Daniels, J. C., and Hunter Diack. Progress in Reading in the Infant School. Nottingham, England: Institute of Education, University of Nottingham, 1960, pp. 1-99. Cited from Learning to Read: The Great Debate, by Jeanne Chall. New York: McGraw-Hill Company, 1967, p. 130.
6. Davis, Allison. "Socio-Economic Influences Upon Children's Learning," Understanding the Child, pp. 10-16, January, 1950.
7. Duggins, James. "The Social Disadvantaged Reader," The English Journal, 54:284-288, March, 1965.
8. Gardner, D. E. M. Testing Results in the Infant School. London, England: Methuen & Company, Ltd., 1942. Cited from Learning to Read: The Great Debate, by Jeanne Chall. New York: McGraw-Hill Company, 1967, p. 131.
9. Gough, H. G. "Relationship of Socio-Economic Status to Personality Inventory and Achievement Test Scores," Journal of Educational Psychology, 37:527-540, December, 1946.
10. Havighurst, Robert J. "Knowledge of Class Status Can Make A Difference," Progressive Education, 27:100-105, February, 1950.

11. \_\_\_\_\_, and Bernice Neugarten. Society and Education. Boston: Allyn and Bacon, Inc., 1962.
12. Hilliard, George H., and Eleanor Troxell. "Informational Background As A Factor in Reading Readiness Progress," Elementary School Journal, 38:255-263, December, 1937.
13. Kasdon, Lawrence M. "Early Reading Background of Some Superior Readers Among College Freshmen," Journal of Educational Research, 52:317, December, 1958.
14. Masland, R., S. Sarason, and T. Gladwin. Mental Subnormality. New York: Basic Books, 1959. Cited from Minority Groups and Class Status and Personality Factors in Scholastic Achievement, by Martin Deutsch. New York: Society for Applied Anthropology, 1960, p. 3.
15. Riden, Sybil. "The Effect of Environment on Reading Ability of Eight-Year Old Children," British Journal of Educational Psychology, 28:225-226, November, 1957.
16. Rossi, Peter H. "Social Factors in Academic Achievement: A Brief Review," Education, Economy, and Society, A. H. Halsey, Jean Floud, and C. Arnold Anderson, editors. New York: Free Press of Glencoe, 1962.
17. Sims, Verner M. Manual for the Sims Score Card for Socio-Economic Status. Bloomington, Illinois: Public School Publishing Co., 1947.
18. Weiner, Max, and Shirley Feldman. "Validation Studies of A Reading Prognosis Test for Children of Lower and Middle Socio-Economic Status," Journal of Educational Psychology, 50:807-809, 1963.
19. Webster's Seventh New Collegiate Dictionary. Springfield, Mass.: G & C Merriam Company, 1963.