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Pupil Achievement in the Ninth Grade as Affected by the Instructional Organization Pattern of School Attended in Seventh and Eighth Grades

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PUPIL ACHIEVEMENT IN THE NINTH GRADE AS AFFECTED BY

THE INSTRUCTIONAL ORGANIZATION PATTERN OF SCHOOL

ATTENDED IN SEVENTH AND EIGHTH GRADES

(TITLE)

BY

A. Lee Shafer

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

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1972

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I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
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PREFACE

Bulging filing cabinets of accumulated test data on students of present and bygone days occupy much valuable space in our schools. One wonders what clues to school improvement may be locked up in these depositories. This study is the result of such curiosity.

The writer wishes to acknowledge the assistance of the guidance department of the East Richland School District in making available the cumulative records of students covering a six year period of school operation.

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CHAPTER I

INTRODUCTION

A. Statement of the Problem.

The East Richland Community Unit District No. 1, Olney, Illinois, operates ten attendance centers consisting of five village schools, each offering grades 1 through 8; three city elementary schools, each offering grades K through 6; one Junior High School, grades 7 and 8; and one Senior High School, grades 9 through 12.

Enrollments have been fairly constant during recent years and are as follows:

TABLE 1

East Richland Schools

School Name	Location	Grades Housed	Average Enrollment
Calhoun	Calhoun, Illinois	1 - 8	120
Claremont	Claremont, Illinois	1 - 8	200
Dundas	Dundas, Illinois	1 - 8	100
Parkersburg	Parkersburg, Illinois	1 - 8	100
Stringtown	Stringtown, Illinois	1 - 8	70
Central	Olney, Illinois	K - 6	420
Cherry	Olney, Illinois	K - 6	480
Silver	Olney, Illinois	K - 6	450
Junior High	Olney, Illinois	7 - 8	420
Senior High	Olney, Illinois	9 - 12	1,050

The five village schools and the three city elementary schools are all organized as traditional self-contained classroom schools, with the classroom teacher teaching all subjects except art and music. These latter subjects are taught by itinerant teachers.

The Junior High School is a fully departmentalized school. With the exception of Art, Music, and Physical Education, each teacher teaches only one subject at one grade level. Art, Music, and Physical Education teachers teach only one subject, but teach both seventh and eighth grades.

Pupils, therefore, enter the High School from two sources:

1. The five village (1 - 8) schools.
2. The Junior High (7 - 8) school.

Those from the five village schools have experienced the seventh and eighth grade as pupils in a traditional self-contained classroom, while those from the Junior High School have experienced departmentalized instruction.

The Board of Education over the years has maintained a rather strict policy which prevented seventh and eighth grade pupils who lived in village attendance center areas from attending the Junior High School. This policy has been defended on the basis of the following points:

1. It was necessary in order to utilize building space in the district more effectively.
2. Programs of instruction in the village schools were equal in quality to those at the Junior High School.

The policy has never been a large issue in the district. Many parents prefer the present arrangement and are glad to have their children attend the "home" school for these two additional years. Others would have preferred to send their children to the Junior High, but have accepted the situation without serious protest.

Those who would prefer the Junior High School cite the following arguments:

1. The Junior High teachers are specialists in their subjects and do a better job of teaching.
2. The departmentalized organization better prepares pupils for entrance into High School, which is completely departmentalized.

Prior to this time, no detailed study has been made to compare the performance of the two groups to determine if the difference in their seventh and eighth grade preparation had any effect on their achievement as high school freshmen.

The problem does, in fact, narrow to the question of whether or not the departmentalized plan of instruction provides a basis for better achievement in high school. Other factors which might be expected to affect pupil achievement are fairly constant for all seventh and eighth grade pupils in the district as indicated below:

1. The same text materials are used in all schools, including the Junior High.

2. Time allotments for each subject are the same for all schools.
3. All schools have equal access to teaching aids.
4. The population of the entire district is quite homogeneous as to ethnic background and socio-economic level.

From the above, it seems fair to consider the classroom organization as an independent variable in the education of seventh and eighth grade pupils in the East Richland District. It was the main purpose of this investigation to determine if the effects of this variable can be observed in the achievement of high school freshmen.

The district has for a number of years maintained a testing program consisting of the following:

1. California Achievement Test, published by McGraw-Hill Book Company, New York.
Administered at start of grades 2 through 8.
2. Otis Mental Ability Test, published by Harcourt, Brace, and World, New York.
Administered at start of grades 4 and 8.
3. National Educational Development Test, published by Science Research Associates, Inc., Chicago. Administered at start of 10th grade.

In addition to the above test data, student files also record all grades earned in high school.

The accumulated data outlined above provided a promising

reservoir of information on which to base an investigation of the problem.

The study was guided by the following hypotheses:

- H₁. Pupils who attend the departmentalized school in seventh and eighth grades will score higher on the National Educational Development Test at the end of their freshman year of high school than will those who attend self-contained classroom schools.
- H₂. Pupils who attend the departmentalized school in seventh and eighth grades will attain higher grade point averages in the freshman year of high school than will those who attend self-contained classroom schools.

This study will provide basis for supportable conclusions concerning equality of educational opportunity in the East Richland District. The study will also be used as a guide for changing future organizational patterns in the district.

A secondary purpose of the study was to determine if there is a measurable difference in achievement at the ninth grade level of pupils from the individual village elementary schools.

B. Significance of the Problem.

The East Richland Community Unit, District No. 1, is now engaged in early stages of planning new facilities for grades 6 - 8. The building housing the Junior High School is

inadequate. Also, the city elementary schools are crowded to capacity with grades K - 6. A proposed new building would house grades 6 - 8. An important undecided question is whether the new building should be planned to also house pupils who are now attending grades 6 - 8 in the village schools.

This study should be of help in answering this question. Should it reveal that achievement is higher under the departmental plan, it would be a strong factor in deciding to include village pupils in the new school plans.

Should the opposite result be obtained, it would tend to favor leaving the village schools intact.

Results from the study will also be a valuable guide in determining the degree of departmentalization to be incorporated in instructional organization of the new school.

C. Assumptions, Limitations, Definitions.

In the study, it is assumed that the patterns of organization for instruction in the seventh and eighth grades is an independent variable affecting the achievement of pupils in the freshman year of high school in the East Richland District. Support for this assumption is given in Section A above.

It is granted that there are other differences in the educational experience encountered by pupils attending village schools and those attending the Junior High School. Among those differences can be listed the opportunity for varied social contacts and participation in extra curricular activities. Measuring the effects of these factors, however, involves value judgments which

are beyond the scope of this study.

Scholastic achievement, however, is the one measure of school success which is most widely accepted. Therefore, the study of instructional organization patterns is limited to their effect on scholastic achievement.

Terms used frequently in reporting this study are defined as follows:

1. Achievement: A pupil's status with reference to attained skills or knowledge, usually as compared to that of other pupils or with the scholastic standards of the school.
2. Village group: The group of pupils selected for study who attended school in a village school under the self-contained classroom type of organization during the seventh and eighth grades.
3. Junior High group: The group of pupils selected for study who attended school at the Junior High School under the departmentalized type of organization during the seventh and eighth grades.
4. Departmental school: A school in which the curricular offerings are divided into subject fields and each teacher is made responsible for giving instruction in a particular subject, the pupils of each grade being taught by several teachers instead of by a single teacher.
5. Departmentalization: The division of the school

organization into departments, with each teacher responsible for teaching one or more subjects.

6. Self-contained classroom: That form of school organization in which one teacher teaches most or all subjects in one or more grades, with pupils receiving instruction in most or all subjects from the same teacher.

D. Review of Related Literature.

Departmentalization as a form of organization for instruction shows great variations in popularity during the past two centuries. Early New England schools during the 17th and 18th centuries were all departmentalized schools. However, between 1850 and 1900, departmentalization disappeared from elementary school practice. In 1900, the practice re-appeared in upper elementary grades in New York schools.

From 1910 to 1929, there was a growing interest in departmentalization in elementary grades, with a 1925 survey of 410 schools in cities of 2,500 to 25,000 population showing that 67% of the eighth grades used some departmentalization.¹

¹Henry J. Otto, Elementary School Organization and Administration (New York, Appleton-Century-Crofts, 1954), pp. 22-27.

During 1940 to 1950, surveys showed that more schools gave up departmentalization than adopted. However, after 1950, the use of departmentalization appeared to be increasing.²

More recent surveys indicate that at the present time, between 60 and 70% of schools use the departmental plan in the seventh and eighth grade.³

One of the most prevalent reasons given for departmentalization at the upper grade level is that it makes it easier for the pupil to make the transition to high school. Another is that teacher specialization makes for better teaching. Anderson surveyed the literature and concluded that "Teacher specialization makes better sense educationally than the conventional self-contained classroom plan. For many pupils, teacher specialization could mean greater achievement, more profound learning, greater interest in learning, and better social and emotional development."⁴

A survey of one large school system revealed that a majority of the teachers favored departmentalization, with only 4% of the teachers of self-contained classrooms reporting that they felt competent in all courses taught.⁵

²Lawrence O. Lodbell and Wm. J. Van New, "The Self-Contained Classroom in the Elementary School," Elementary School Journal, 63 (Jan., 1963), pp. 212-217.

³Middle Schools in Theory and in Fact," N.E.A. Research Bulletin, 47 (May, 1969), pp. 49-52.

⁴Richard C. Anderson, "The Case for Teacher Specialization in the Elementary School," Elementary School Journal", 62 (Feb., 1962) pp. 253-260.

⁵George Ackerlund, "Some Teacher Views on the Self-Contained Classroom," Phi Delta Kappan, 40 (April, 1959), pp. 283-285.

Other studies have made findings which are quite the opposite. Otto reports on a study conducted in 1927 in which it was concluded that pupils taught by the departmental plan made considerably poorer gains than those taught by the grade plan.⁶

In 1931, Gerberich and Prall reported a study made of achievement of pupils in self-contained classrooms compared with pupils in departmentalized schools. They concluded that there was little evidence on which to base any general conclusions concerning the effectiveness of either plan.⁷

In 1955, Gumaer surveyed New Jersey junior high school principals and found two-thirds being opposed to complete departmentalization in the junior high school.⁸

Spivak studied high school achievement of 41 matched pairs of pupils from departmentalized and self-contained seventh and eighth grade schools. He concluded that departmental pupils did not do better either on measures of academic achievement or on school adjustment measures.⁹

⁶Otto, op. cit., p. 302.

⁷J. R. Gerberich and C. E. Prall, "Departmental Organization versus Traditional Organization in the Intermediate Grades," Elementary School Journal, 31 (May, 1931), pp. 671-677.

⁸Harry T. Gumaer, "New Jersey Junior High Schools Question Emphasis on Departmentalization," Nat'l Association of Secondary School Principals Bulletin, 42 (Nov., 1958), pp. 18-20.

⁹Monroe L. Spivak, "Effectiveness of Departmental and Self-Contained Seventh and Eighth Grade Classrooms," The School Review, 64 (Dec., 1956), pp. 391-396.

Another study compared mathematics achievement of fifth grade pupils from departmentalized and self-contained classroom schools and found that departmentalization was not associated with higher achievement in arithmetic skills.¹⁰

As the above research would indicate, there is no conclusive evidence to support either plan of organization as superior to the other. Other researchers on the subject have reached similar conclusions after surveying research findings.

Otto concludes that "Research thus far has failed to give a clear-cut answer to an old and fundamental question about organization."¹¹

After surveying the literature, Dunn concluded that identical benefits are claimed by advocates for and opponents of departmentalization.¹²

Shane and Polychrons concluded that while departmentalization was widespread, it was neither demonstrably helpful nor definitely harmful to children.¹³

¹⁰E. B. Price, A. L. Prescott, and K. D. Hopkins, "Comparative Achievement with Departmentalized and Self-Contained Classroom Organization." The Arithmetic Teacher, 14 (March, 1967) pp. 212-215.

¹¹Henry J. Otto and David C. Sanders, Elementary School Organization and Administration, (New York, Meredith, 1964), p. 78.

¹²Mary Dunn, "Should There Be Any Set Type of Elementary School Organization?" Elementary School Journal, 53 (Nov., 1952), pp. 199-206.

¹³Harold G. Shane and James Z. Polychrons, "Elementary Education--Organization and Administration," Encyclopedia of Educational Research (New York, The McMillan Co., 1960), pp. 421-430.

Hagman listed eighteen advantages and nineteen disadvantages as being commonly expressed concerning departmentalization and concluded that none proved or disproved the validity of the departmental system as applied to public schools.¹⁴

Rouse studied twenty departmentalized and twenty self-contained schools and concluded that curriculum practices were not significantly different in actual practice in the two types of schools.¹⁵

The above cited literature would seem to discourage the investigation now being reported. However, the dual organizational patterns which have been in effect in the East Richland District during the past two decades have provided the basis for studying a far larger and better controlled population sample than any previously reported in the literature.

¹⁴Harlan L. Hagman, "Shall We Departmentalize?" Nation's Schools, 28 (July, 1941), p. 30.

¹⁵Margaret Rouse, "A Comparison of Curriculum Practices in Departmental and Non-Departmental Schools," Elementary School Journal, 47 (Sept., 1946), pp. 34-42.

CHAPTER II

METHOD OF ATTACK

A. Population Studied.

In selecting the student population to study, it was decided that proper comparisons could be made only on students for whom a complete set of test data could be obtained. A complete set of data was considered to be the following:

1. I. Q. score at eighth grade level.
2. Score on California Achievement Test at the start of the seventh grade.
3. Score on National Educational Development Test at start of the tenth grade.
4. Grades earned in ninth grade. For this purpose, only grades in required ninth grade courses were considered. These included grades in English, Mathematics, Social Studies, and Science.

Using these criteria, the records were searched and the population studied is indicated in the following table. The "year" headings on the table columns indicate the year the students graduated (or will graduate) from high school.

TABLE 2

ANALYSIS OF POPULATION--NUMBER OF PUPILS MEETING
CRITERIA FOR STUDY BY SCHOOL AND YEAR

School	1968	1969	1970	1971	1972	1973	Total
Calhoun	5	9	8	7	12	15	56
Claremont	11	18	18	8	12	14	81
Dundas	14	5	9	9	10	10	57
Parkersburg	9	5	8	5	7	6	40
Stringtown	13	7	10	7	11	5	53
Total - Village	52	44	53	36	52	50	287
Junior High	104	101	113	116	116	135	685
Total Population	156	145	166	152	168	185	972

In making comparisons which follow, the Village group (287) is compared with the Junior High group (685). Also, the groups from the individual schools are compared.

B. Comparisons Made.

To investigate all possible evidence that one group might have been better prepared for high school than the other, the following comparisons were made:

1. Total Village group compared to total Junior High School group as to the relation between their 7.1 achievement and

- their achievement at grade 9.
2. Low ability group from Village schools compared to low ability group from Junior High School as to the relation between their 7.1 achievement and their achievement at grade 9.
 3. High ability group from Village schools compared to high ability group from Junior High School as to the relation between their 7.1 achievement and their achievement at grade 9.
 4. Low achieving group from Village schools compared to low achieving group from Junior High School as to their achievement in grade 9.
 5. High achieving group from Village schools compared to high achieving group from Junior High School as to their achievement in grade 9.

CHAPTER III

PRESENTATION AND ANALYSIS OF EVIDENCE

A. Total Group Comparisons.

To make the first comparison, the following data for each student from the various schools was averaged to yield a mean score for each individual school and for the two main groups to be compared:

1. Student I. Q. at grade 8.
2. Results on California Achievement Test at grade 7.1, expressed as the "observed grade placement" (O.G.P.) and percentile rank.
3. Results on National Education Development Test after completion of freshman year in high school.
4. Grade point average as determined on a four point scale for required freshman courses.

The following table presents the mean results for each school as well as for the total Village group and for all schools.

At this point in the study it became evident that the Junior High group not only scored higher on the National Education Development test and had a higher grade average, but they also had a 3.9 higher I. Q. and were .4 of a year more advanced in achievement at the start of the seventh grade.

TABLE 3
SCHOOL AVERAGES

School	I. Q. 8th Grade	C.A.T. 7.1 O.G.P.	7.1 %ile	N.E.D.T. %ile	Grade Ave. 9th Grade
Calhoun	108.1	8.5	77.2	60.1	2.32
Claremont	103.3	7.9	63.8	51.0	2.09
Dundas	103.6	8.4	70.6	55.7	2.39
Parkersburg	100.8	7.8	63.4	46.8	2.17
Stringtown	101.1	7.9	65.7	53.8	2.50
All Village	103.5	8.1	68.1	53.6	2.28
Junior High	107.6	8.5	75.5	60.6	2.43
All Schools	106.4	8.4	73.3	58.5	2.39

In an attempt to determine if the higher N.E.D.T. score could be attributed to the effects of instruction at the Junior High School, the schools and groups were compared on the basis of the ratio between their N.E.D.T. score and their achievement at grade 7.1 Table 4 below shows the results from this comparison.

Analyzing the data from Table 4, it is revealed that the All Village group shows a ratio of 78.7%, while the Junior High group shows a ratio of 80.3. In other words, the mean N.E.D.T. score of the All Village group was 78.7% of their 7.1 California Achievement Test percentile score, while the mean N.E.D.T. score of the Junior High School was 80.3% of their 7.1 California Achievement Test percentile. This does indicate an advantage of 1.6% for

the Junior High group, but the advantage would seem insignificant.

TABLE 4
RATIO OF N.E.D.T. %ILE TO 7.1 C.A.T. %ILE

School	C.A.T. %ile	N.E.D.T. %ile	Ratio
Calhoun	77.2	60.1	77.8
Claremont	63.8	51.0	79.9
Dundas	70.6	55.7	78.9
Parkersburg	63.4	46.8	73.8
Stringtown	65.7	53.8	81.9
All Village	68.1	53.6	78.7
Junior High	75.5	60.6	80.3
All Schools	73.3	58.5	79.8

More significant is the indication that both groups as well as the individual school groups tended to achieve at about the same relative level as high school freshmen as they had been achieving at grade 7.1.

B. Low Ability Group Comparisons.

Since little difference in achievement gain was observed when the total Village group and the total Junior High School group were compared, it was decided to investigate further to determine if low ability students had responded better to either the self-contained classroom of the village schools or the departmentalized

instruction of the Junior High School.

To make this comparison, the scores of all students scoring between 90 and 99 inclusive on the Otis Mental Ability Test were segregated. This produced a sample of 67 students who were part of the Village group and 104 students who were a part of the Junior High group.

The mean test results were then computed for each school group and are recorded in Table 5 below.

TABLE 5
AVERAGES - LOW ABILITY STUDENTS

School	No. Pupils	I. Q. 8th Gr.	C.A.T. 7.1 O.G.P.	%ile	N.E.D.T. %ile	Grade Aver.
Calhoun	9	95.5	7.5	58.9	37.9	1.98
Claremont	24	95.3	7.1	48.5	35.6	1.67
Dundas	11	94.7	7.1	49.2	32.5	1.95
Parkersburg	10	94.4	7.3	53.4	35.7	1.98
Stringtown	13	95.8	7.3	53.6	39.2	1.92
All Village	67	95.2	7.2	51.7	36.1	1.85
Junior High	104	95.8	7.3	53.9	37.8	1.87
All Schools	171	95.6	7.3	53.0	37.1	1.86

Since the students selected for this comparison were all from the 90 - 99 I. Q. group, the average I. Q. for each group is quite similar. Also the achievement range at the 7.1 grade level as indicated by the California Achievement Test grade placement

and percentile scores is quite narrow. It would appear that at the 7.1 grade level, the Village group and the Junior High group were very closely matched. If either the self-contained classroom school or the departmentalized school had an advantage in furthering pupil achievement, it should surely show up with this comparison.

Such was not the case, however, as the 67 pupils from the village schools scored at the 36.1 percentile on the National Educational Development Test at the end of the freshman year and the 104 Junior High pupils scored at the 37.8 percentile, a difference of only 1.7 percentiles. Also, the Village group averaged within .02 grade points of the Junior High group. (1.85 vs 1.87).

These differences are not of a magnitude that would support a conclusion that either organizational pattern was superior to the other in furthering the achievement of low ability students.

To further explore this relationship, the ratio of N.E.D.T. percentile score to the 7.1 grade California Achievement Test score was computed and is reported in Table 6 below.

The ratio of 69.8% for the Village group and 70.1 for the Junior High group further confirms the similarity of achievement during the seventh and eighth grades for the two groups.

TABLE 6

RATIO OF N.E.D.T. %ILE TO 7.1 C.A.T. %ILE
LOW ABILITY STUDENTS

School	C.A.T. %ile	N.E.D.T. %ile	Ratio
Calhoun	58.9	37.9	64.3
Claremont	48.5	35.6	73.4
Dundas	49.2	32.5	66.1
Parkersburg	53.4	35.7	66.9
Stringtown	53.6	39.2	73.1
All Village	51.7	36.1	69.8
Junior High	53.9	37.8	70.1
All Schools	53.0	37.1	70.0

C. High Ability Group Comparisons.

Attention was then turned to the high ability students to see if there was a difference in rate of achievement of this segment of the groups during the freshman year at high school.

To make this comparison, the scores and grades of students scoring between 115 and 124 inclusive on the Otis Mental Ability test were segregated. This produced a sample of 47 students from the Village group and 163 students from the Junior High group. The mean scores and grades for the members of this age group from each school are shown in Table 7 below.

TABLE 7
AVERAGE - HIGH ABILITY GROUPS

School	No. Pupils	I. Q. 8th Gr.	C.A.T. O.G.P.	7.1 %ile	N.E.D.T. %ile	Grade Aver.
Calhoun	13	118.2	9.4	92.2	84.3	2.77
Claremont	15	118.5	9.4	90.3	85.1	3.11
Dundas	9	118.8	9.8	95.2	87.1	3.19
Parkersburg	3	120.3	10.1	98.0	90.3	2.89
Stringtown	7	116.6	9.3	91.0	79.4	3.24
All Village	47	118.3	9.5	92.4	84.7	3.04
Junior High	163	118.6	9.6	92.7	84.2	2.98
All Schools	210	118.5	9.6	92.6	84.3	2.99

Selection on the basis of this I. Q. range again produced two groups with nearly identical I. Q. and 7.1 grade achievement:

	<u>Mean I. Q.</u>	<u>C.A.T., O.G.P.</u>
Village Group	118.3	9.5
Junior High Group	118.6	9.6

The similarity of the two groups remains approximately the same at the end of the freshman year of high school:

	<u>N.E.D.T. %ile</u>	<u>Grade Point Aver.</u>
Village Group	84.7	3.04
Junior High Group	84.2	2.98

Again, one must conclude that the differences in instruction of the two groups during the seventh and eighth grades has not had

a significant effect upon their achievement level as high school freshmen.

This data was further examined by computing the ratio of N.E.D.T. percentile rank to 7.1 California Achievement Test percentile rank. Again, only a very slight difference was found. Table 8 below records the result of this computation for all schools as well as the combined village group.

TABLE 8
RATIO OF N.E.D.T. %ILE TO 7.1 C.A.T. %ILE
HIGH ABILITY STUDENTS

School	C.A.T. %ile	N.E.D.T. %ile	Ratio
Calhoun	92.2	84.3	91.4
Claremont	90.3	85.1	94.2
Dundas	95.2	87.1	91.5
Parkersburg	98.0	90.3	92.1
Stringtown	91.0	79.4	87.2
All Village	92.4	84.7	91.7
Junior High	92.7	84.2	90.8
All Schools	92.6	84.3	91.0

D. Low Achieving Group Comparisons.

Continuing to examine the data in search of evidence that one type of organization was superior to the other in advancing student achievement, the records of low achieving students were segregated and compared.

For this comparison, the records of all students who scored between 7.0 and 7.4 inclusive on the California Achievement test at the start of the seventh grade were segregated. This group consisted of 32 students from village schools and 67 students from the Junior High School.

The mean scores and grade averages for members of this group from each school are shown in Table 9 below.

TABLE 9
AVERAGES - LOW ACHIEVING GROUP

School	No. Pupils	C.A.T. 7.1 O.G.P.	%ile	N.E.D.T. %ile	Grade Average
Calhoun	5	7.2	52.4	28.4	2.00
Claremont	11	7.2	50.9	38.9	1.62
Dundas	6	7.2	52.7	24.8	1.81
Parkersburg	4	7.2	49.5	34.2	1.87
Stringtown	6	7.2	49.0	40.5	1.83
All Village	32	7.2	50.9	34.3	1.79
Junior High	67	7.2	51.9	39.8	1.79
All Schools	99	7.2	51.6	38.0	1.79

Selection on the basis of this achievement range again produced two groups with almost identical achievement at the start of the seventh grade:

	<u>C.A.T.</u> <u>O.G.P.</u>	<u>C.A.T. 7.1</u> <u>%ile</u>
Village Group	7.2	50.9
Junior High Group	7.2	51.9

Comparison of achievement of these two groups on the N.E.D.T. after completion of the freshman year does show considerable difference:

Village Group - N.E.D.T. %ile - 34.3

Junior High Group - N.E.D.T. %ile - 39.8

The significance of this difference becomes questionable, however, because the two groups did end the freshman year with identical grade point averages--1.79. From this result, one could only conclude that for low achieving students, neither the self-contained classroom of the village schools or the departmentalized classes of the Junior High school held any advantage in preparing students for high school.

E. High Achieving Group Comparisons.

The final comparisons made involved the selection of a high achieving group for study. For this comparison, the records of all students scoring observed grade placements of 9.0 to 9.4 inclusive on the California Achievement Test at the start of the seventh grade were segregated. This produced a group consisting of 40 students from village schools and 90 students from the Junior High School.

The mean scores and grade averages for members of this group from each school are presented in Table 10 below.

TABLE 10
AVERAGES - HIGH ACHIEVING GROUP

School	No. Pupils	C.A.T. O.G.P.	7.1 %ile	N.E.D.T. %ile	Grade Average
Calhoun	11	9.1	89.8	71.5	2.39
Claremont	10	9.2	92.3	75.3	2.68
Dundas	12	9.2	91.4	77.7	2.81
Parkersburg	2	9.1	91.5	72.0	3.16
Stringtown	5	9.2	92.4	77.8	3.27
All Village	40	9.2	91.3	75.1	2.74
Junior High	90	9.2	91.5	74.5	2.75
All Schools	130	9.2	91.4	74.7	2.75

As can be seen from the table, this selection yielded two groups with almost identical mean achievement scores at the start of their seventh grade:

	<u>C.A.T.</u> <u>O.G.P.</u>	<u>7.1</u> <u>%ile</u>
Village Group	9.2	91.3
Junior High Group	9.2	91.5

After completion of grades 7 and 8, and the freshman year of high school, we see that the relative achievement level remains unchanged for the two groups:

	Achievement at End of Freshman Year	
	<u>N.E.D.T. %ile</u>	<u>Fresh. Grade Ave.</u>
Village Group	75.1	2.74
Junior High Group	74.5	2.75

Like all comparisons reported above, this one also fails to reveal any evidence of superior achievement as high school freshmen that could be attributed to the instructional organization of the school attended in grades 7 and 8.

CHAPTER IV

SUMMARY AND CONCLUSIONS

In this study the achievement of two groups of pupils have been studied. The Village group of 287 pupils who experienced the seventh and eighth grades in self-contained classrooms was compared with the Junior High group of 685 pupils who experienced the seventh and eighth grades in a fully departmentalized school. The basis of comparison was the relationship between their achievement level at the start of the seventh grade and their performance on the National Educational Development Test and their grade point average at the conclusion of the ninth grade.

Comparisons were made of the total groups as well as between sub-groups selected on the basis of achievement and ability.

The study was guided by the following hypotheses:

- H₁. Pupils who attend the departmentalized school in seventh and eighth grades will score higher on the National Educational Development Test at the end of their freshman year of high school than will those who attend self-contained classroom schools.

H₂. Pupils who attend the departmentalized school in seventh and eighth grades will attain higher grade point averages in the freshman year of high school than will those who attend self-contained classroom schools.

Reviewing the evidence presented in Chapter III dictates the conclusion that neither hypothesis was sustained. While there were slight advantages shown for the departmentalized school in some comparisons, the difference was not of a magnitude that could be considered conclusive.

Rather, the total evidence points to an astounding similarity between the two groups. Not only did the two groups perform similarly as high school freshmen, but there was very little variation between the five schools which made up the village group.

As a basis for future planning in the East Richland district, the study does suggest the following conclusions:

1. Since neither the self-contained classroom or the departmentalized Junior High school appear to be superior in advancing pupil achievement, a totally new approach to organization for instruction for this age group should be explored. Curricula and techniques which enhance motivation and interest should be given top priority. Opportunity for individual learning progress should be offered.

At present, the organization of both the self-contained classroom schools and the departmentalized schools is too rigid to accommodate such changes.

2. There is substantial evidence that by the time a pupil reaches the seventh grade, his achievement level has become rather firmly established. Examination of the individual scores involved in this study show that a pupil's success in the ninth grade can be quite accurately predicted by examining his achievement level at the start of the seventh grade. This would seem to indicate two possibilities or opportunities for the school.
 - a. Give more attention to problems of individual learners early in their school experience.
 - b. Make the transition school a highly motivating experience so that past patterns of low achievement will be abandoned under the influence of new experiences and the opportunity to work and achieve as an individual learner.

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