GROUPED AND NON-GROUPED ACHIEVEMENT IN SEVENTH GRADE SOCIAL STUDIES

by

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B.S., The Kansas State Teachers College, 1966

A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas 66502

1972

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ACKNOWLEDGEMENTS

I wish to thank the Junction City Junior High counseling department without whose records on testing this study would not have been possible. Thanks, also, to my faculty examining committee who helped with the style and form of the paper. The committee included Herbert E. Kaiser, J. Harvey Littrell, and Roy C. Langford. Special thanks to Herbert E. Kaiser who helped with the computer work and statistics.

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BACKGROUND FOR THE STUDY ON ACHIEVEMENT GROUPING

GENERAL STATEMENTS

Mention grouping of school children for academic learning in the "democratic" American society and immediately you receive a negative reaction from many people. The grouping of pupils, however, can be for helping the pupil in a positive way. If a student is two or three grades below his grade level in achievement according to nationalized achievement tests, something should be done to try to help the child progress and, if possible, raise his achievement rate.

Once the low achieving pupil leaves the self-contained elementary classroom in many public schools, he is in for more achievement trouble. A teacher teaching five one hour classes a day with an average of thirty children in each class has difficulty reaching the low achiever. If the low achiever is reached, the teacher may have difficulty keeping the remainder of the class members interested and progressing at their individual achievement rates. In a seventh grade class, for example, if pupils are assigned to classes at random there is a good chance that the achievement grade level scores could range from high tenth grade to low fourth grade. The teacher of such a class, undoubtedly, would have a difficult time in helping each student progress at his achievement level in a class period of one hour or less a day.

Most of the low achievement students are poor readers, therefore, in classes of social studies a teacher encounters a reading problem among the

students. To gain information for social studies, it is very important that the student can read.. and comprehend the text being used. Many of the lower achieving students can not read nor comprehend the texts written for their grade level as usually they are written two or three grade levels above their actual reading level.

The lower achieving student is usually more dependent on the teacher for motivation. He requires more of the teacher's time, and without help he quickly loses interest. He loses, his fellow students lose, and the teacher fails to reach the pupils from the stand point of motivation and achievement.

If the low achievers are homogeneously grouped in the subjects in which they are low in achievement, the text they are required to study can be on a lower reading level and yet contain the same subject material as their grade level. For example, if a student is in a seventh grade social studies class but reads on a fourth or fifth grade level, a social studies text could be selected that his group could read. The teacher should use a simpler vocabulary in presenting the lesson, cover the text material more slowly, and try to help the individual student raise his achievement level.

The classes of homogeneously grouped pupils should be smaller in size allowing the teacher greater freedom of individualization. Instead of having a class of thirty or more students, the teacher should have a class of twenty low achieving students, or perhaps even less than twenty.

PROBLEM

It is hypothesized that pupils of low achievement when placed in homogeneous groups according to achievement grade level will improve at a greater rate in seventh grade social studies than students of the same mental ability

but higher achievement in a random or heterogeneous classroom, according to standardized achievement tests over a school year period.

DEFINITIONS

An underachiever or a student of low achievement *does not* necessarily mean a student of low intelligence. It simply means that the student for some reason or another was not working on his grade level in school. The low achievement in some cases, however, may be due to intelligence. Based on achievement received on nationally standardized achievement tests, homogeneously grouped students were matched with the grouped students of the same intelligence or ability but originally rated higher in achievement. They were matched identically sex wise in addition to intelligence. The homogeneous group sense that they were similar as they were all low achievers. The heterogeneous group being the students in the random group classes also knew they were in unrelated groups of achievement. The heterogeneous group used in this comparison was a group of students that had the same mental ability or intelligence as the homogeneous group but rated higher in achievement. The low achievement grouping was done with the purpose of helping each individual student in mind. The objective of the grouping was to raise the achievement of the low achievers as quickly as possible so that they were able to do the work at or near their peer grade level based on standardized tests.

Social studies is by no means the only academic subject from which achievement can be determined by nationalized tests. If reading and English are low, social studies will usually be lower because of the dependency of social studies on the other two subjects. No attempt was made, in this study, to study English and reading achievement levels related to the samples.

The grouping referred to was the selecting of lower achieving students and placing them in smaller classes with special materials and methods of teaching endeavoring to raise the achievement of the pupils. Neither the intelligence nor the social standing of the child was considered when selecting the pupils for the low achievement group.

Chapter 2

REVIEW OF LITERATURE ON ACHIEVEMENT GROUPING

REVIEW

The literature pertaining to grouping is like a maze (Passow, 10). The research findings are great in quantity, the quality is irregular and the results are inconclusive. There are many different schemes and a wide variety of programs and practices all of which involve some form of classification of the selection of students, each are aiming to increase either teaching or learning effectiveness (Passow, 10).

In the 1930's there was a great deal of research on the topic of grouping but by 1950 there was practically none. In the 1960's the idea began to find its way back into the larger public schools (Passow, 10). The United States Office of Education in 1960 found that of 4,307 schools reporting in the United States 34.4 per cent grouped homogeneously in grades seven and eight (Dean, 5). In the year 1960 it was also noted that perhaps the most controversial issue of classroom organization was whether or not students of like achievement should be grouped together for purposes of instruction (Goodlad, 8).

The many different schemes for grouping make it difficult to follow research findings on achievement. Some of the differences of past research according to Passow (10, 288) have been:

1. The studies vary considerably in scope of aim and purpose.
2. The studies differ in the number of the students, the number of groups and the size of classes involved.
3. The studies differ in length ranging from a semester or less to a year or more.
4. The studies differ in the adequacy of selection bases and the means of matching experimental and control groups.

5. The studies differ in the differentiation of curricula and methods of teaching.
6. The studies differ in the deployment of teachers in the various groups.
7. The studies differ in instruments and techniques used in evaluating changes in students.
8. The studies have generally failed to assess the effects of grouping on teachers and administrators.

Any one of the eight factors mentioned could in some degree effect the outcome of the desired research on grouping. It becomes very difficult to use the past research when conducting research on a program's effectiveness in a specific school. Going through all of the studies that differ so much from the specific one of a certain school's program of grouping could take a great deal of time and produce very little likeness to the school's program. The eight factors probably account for many negative results obtained from grouping. In other instances very positive results may also be accounted for. There are many ways to group students and some are better than others. The results of achievement grouping seem to depend less upon the fact of grouping but more upon the philosophy behind it (Cornell, 3).

Many studies suggest that number five on the list of factors is very important (Miller and Otto, 9). The conclusions are that achievement grouping is ineffective unless accompanied by changes in methods and materials (Miller and Otto, 9). Unless accompanied by curriculum and method change, grouping is ineffective and its prime purpose to bring about different instruction is lost (Passow, 10). It has been noted that skillful teachers in charge of low achievement classes differentiated subject matter and class procedure even though they followed essentially the same course of study (Billet, 1:159). In short, the critical factor is the teacher's ability to adapt instruction to the actual group before him. Classroom climates, standards and values differ significantly among teachers, and "compatibility"

between student and teacher is the most important basis for placing students in effective classes (Thelen, 11).

The "compatibility" of teacher and students leads to other research on grouping and the area in which most of its critics stand. An example of this criticism is, "both high and low achievement grouping showed loss of self-esteem with grouping" (Borg, 2:98). Was this a failure of grouping or the failure of "compatibility"? The answer is not known as not enough of the research is revealed in the report. Another study of self-concept and grouping came up with opposite conclusions. No significant differences were found between heterogeneous and homogeneous grouping on the acceptance of self or academic self-concept (Dyson, 6). The research indicated negative or positive self-image was more derived from academic grades than from grouping.

Whether or not a student achieves when he is placed in a low achievement group seems to rest on the materials used and the way they are presented to the student by the teacher. There is no clear-cut evidence that achievement grouping is either advantageous or disadvantageous (Miller and Otto, 9). There is no "right" way to teach these groups, the grouping should be done according to styles of teachers (Thelen, 11). Because of the vagueness of how to group exactly in all cases, it has been found that achievement grouping produces a better result about a third of the time (Eckstrom, 7). Most schools starting homogeneous grouping have difficulty matching methods, materials, student and teacher, and this is of vital importance in achieving successful groups.

Prior to year 1955, most studies tended to favor ability grouping for both rapid and slow learners with the latter benefiting more from the practice (Goodlad, 8). Many studies since 1960 tend to show that once a child

is assigned to an ability level he is likely to remain there (Daniels, 4). This leads to criticism that low achievement groups are dumping grounds for students, who for a variety of reasons do poorly in academic work. This could be the case in some schools where grouping is done, but it need not be the case in all grouping situations. Each program needs to be examined on an individual basis rather than grouping programs in all schools as a whole. There is such a maze of research and so many different ways of grouping that it is impossible to assess grouping as a whole successfully.

PERTINENT OPINION

Glen Heathers, according to the latest edition (1970) of Encyclopedia Educational Research, sees grouping as a central theme of organization that is on its way out again and is being replaced by "individualized instruction." He lists these short comings of past grouping research :

1. The failure to measure the implementation of the arrangements that are being tested.
2. The failure to design the plan under test on the basis of an adequate theoretical model.
3. The failure to determine how well the new practices accomplish desired outcomes.
4. The failure of studies to permit a determination of the contribution made to outcomes by each of the features of the plan under test.

Achievement grouping, however, is a form of individualizing for better student comprehension. The student is not to be stigmatized but should be helped to achieve a higher working level.

SUMMARY

Based on overall scientific findings, one must conclude that the knowledge of achievement grouping or grouping as a whole is very incomplete. It is probably best to do research on the school system in which the

researcher is interested. Successful grouping that may produce the best results. Grouping that is successful in one system may not be successful in another because so many variables are involved.

Chapter 3

METHOD OF RESEARCH ON LOW ACHIEVEMENT GROUPING

DESCRIPTION OF SUBJECTS (SAMPLE)

The subjects used in the study of achievement grouping were seventh grade students in social studies classes. The school was the Junction City Junior High School, part of the Geary County School System in Junction City, Kansas. The school had over nine hundred students with more than three hundred of them in the seventh grade. The Junction City Junior High is the only junior high school in a city of nearly twenty thousand people. The only other junior high school in the school system is located at Fort Riley. The community's biggest problem, transient population, did not help in regard to research on grouping of low achievement pupils. The fluctuating population of the city, as well as of the schools, is caused by the nearby military base. The problem affected the research only by reducing the number of students in the study by sixteen to allow for the "moving out" and "moving in" process. No complete data was available for the sixteen.

The low achievement grouping was initiated by the counseling department of the junior high after they found that the low achievement students were having a difficult time adjusting to junior high school. Through the junior high testing program it was determined that a lot of the low achievement was caused because so many of the low achievers were poor readers. Grouping began with an effort to bring the low readers' achievement level up so they wouldn't have such a difficult time adjusting. The plan, in the opinion of those involved, was a success. It was also discovered that some students were having trouble with basic English and mathematics.

Special low achievement groups were set up in English and in mathematics the following year. All the reading, English, and mathematics low achievement programs had special materials bought for them and teachers were hired just to teach the low achievement groups. The classes varied in size, but none had more than twenty pupils nor less than fifteen pupils.

It should be mentioned that the low mathematics achiever, for example, might not be in the low achievement grouping in reading or in English. The students were in the low achievement class as a result of national achievement tests (fourth and third grade equivalent levels), grades previously received in the subject, and upon the recommendation of their former instructor. The students were never placed in the group because of their background or home life as these factors were never considered when grouping. Many of the students came from what could be called lower economic homes, however.

Social studies and science were added the third year of the program. Special books were bought and special teachers hired for the programs as had been done for mathematics, English and reading.

The low achievement social studies teacher had forty of the lowest achieving seventh grade students. These students were not special education level students but just low achievers. The forty low achievers were divided into two classes with twenty pupils in each class. As nearly as possible the lowest achievers were placed in one of the classes and the highest of the forty low achievers in the other class. The teacher also taught two classes of low achieving eighth graders in American history.

The textbook purchased for the seventh grade social studies covered the eastern hemisphere countries, the same countries the heterogeneous group

studied, but the text was written on a 5.5 grade level of reading. The chapters in the text were a page or two pages long, and had many questions for students to answer at the end of each chapter. Vocabulary and social studies skills such as map reading, chart reading, etc. were emphasized in the course.

The students matched with the low achievers in this research had one of the other two teachers teaching seventh grade social studies. Each teacher of the heterogeneous groups taught five classes with an average of thirty students in a group. The text used, also, covered the eastern hemisphere but was written on the seventh grade reading level. After the forty lowest achievers were chosen for the two homogeneous groups, the rest of the seventh graders were randomly placed in the other two social studies classes, therefore these classes contained students of all abilities and achievement. The very lowest achievers were placed in the special groups.

From these two groups forty-eight students were picked for a random sampling of low achievement students versus regular students of the same mental ability but higher achievement at the beginning of the seventh grade. They were matched by sex and intelligence test scores. The purpose was to see which group improved the most from the place they were near the end of the sixth grade in April when the first achievement test was given. The grade equivalent scores from an achievement test were the scores used in the study. Twenty four students were chosen to represent each group. Twelve boys and twelve girls were chosen from both groups and matched exactly by intelligence and sex in pairs. The sex and intelligence of the students therefore, was not a factor working against the research.

DESCRIPTION OF MEASURES

The intelligence scores on tables 2 and 3 (appendix) are based on the Otis-Lennon Mental Ability test given the first part of the seventh grade school year. It is a group intelligence test.

The Metropolitan Achievement Test (Social Studies) was the test used for the comparison of the low achievement group and the higher achievement group. The Otis-Lennon scores were used to match the groups in mental ability. The Stanford Achievement Test was not used for comparison of the match pair groups. It was given to the low achievement group to determine their achievement, but not given to the other group.

The Advanced Metropolitan Achievement Test was given to both groups of the seventh grade at the same time in March of the school year. However, the Intermediate Metropolitan Achievement Test was given in April of the sixth grade year by individual sixth grade teachers throughout the elementary system and was scored by them. The low achieving group was selected in the seventh grade on the basis of the Intermediate Metropolitan Achievement Test, teacher's grades and recommendation.

The Metropolitan Achievement Test was not intended to measure the speed with which children can answer test questions. The test seeks to measure attainment of certain important objectives of social studies instruction in the elementary and junior high grades. According to Robert J. Solomon in The Sixth Mental Measurement Yearbook (1965) these objectives are essential. He stated that these objectives are largely in the realm of knowledge and study skills. The major criticism of the test might be that it is not comprehensive enough. More than just information (facts) and skills could have been asked. "Too many questions require the naming of person, place,

or event, and too few the knowledge, comprehension or application of a principle generalization, or concept," according to Solomon. He, also, says that the reliabilities of the tests are satisfactory.

The Metropolitan Achievement Tests Manual suggested a number of uses of results obtained from giving the tests. Four of the suggestions were:

1. To determine the achievement level of pupils in each grade and subject.
2. To obtain data on the performance of each class in the system.
3. To discover areas of subject matter strength or weakness for a school as a whole.
4. To provide a continuing record of achievement in the school, which will reflect changes in curriculum and the characteristics of the pupil populations.

The Metropolitan Achievement Test, as well as other school-wide tests, were given to the students at the junior high in Junction City by the school's counselors. These counselors not only give the tests, but record and evaluate the results. The counselors were the first to see the need for some type of individualization in the classroom in order to reach the low achiever. Homogeneous grouping was the route that was chosen.

Table 1 (page 26 in the appendix) gave information about the group of low achieving students. The table contains identification number, sex, six grade achievement grade equivalent scores, seven grade achievement grade equivalent scores, and intelligence quotients. The grade equivalents are in social studies information and skills.

Table 2 (page 27 in the appendix) gave information about the group of students from the regular achievement class.

Table 3 (page 28 in the appendix) gave information about the low achievement group's scores on the Stanford Achievement Test. The test was given in September of their seventh grade year and again in April of that

year. Only the low achievers took the test. This test gave just the grade equivalent scores in social studies and did not give separate equivalents for information and skills.

Chapter 4

RESEARCH FINDINGS ON ACHIEVEMENT GROUPING

PROBLEM RESTATED

It was hypothesized that pupils of low achievement when placed in homogeneous groups according to achievement levels would improve at a greater rate in seventh grade social studies than students of the same sex and ability, but higher achievement in a heterogeneous classroom. The comparison was made from standardized achievement tests over a school year period. The experimental group was composed of the grouped students with special instruction and the control group embraced non-grouped students with traditional instruction.

TECHNIQUE

The difference plus or minus in each individual's score (grade equivalents) on the Metropolitan Achievement Tests first had to be established. This information is given in Table 4 (page 29 in the appendix) for both matched groups.

Using a computer with the information from Table Four a t-test for two related samples was used to determine whether the two groups of twenty-four students differed significantly in achievement. The computer center at Kansas State University was used to compute the t-test.

The level of significance used was .05. A two-tailed test was used. The formula for the t-test of matched pairs was:

$$t = \frac{M_1 - M_2}{\sqrt{\frac{N(\Sigma D^2) - (\Sigma D)^2}{}}}$$

FINDINGS

Information was given in Table 1 on page 18 (next page) for the results of the t-test for both skills and information achievement for the matched pairs. The degrees of freedom, mean for the experimental group, and mean for the controlled group were also shown. The standard deviations for both groups were given in Table 2 on page 19. To attain the .05 level of significance with twenty-three degrees of freedom 2.069 was the test level needed. The social studies skills achievement was significantly greater in the experimental group (low achievers). The hypothesis was supported. The information achievement in social studies was not significant at the .05 level or even at the .2 level. The hypothesis was rejected for information achievement in social studies at the .05 level of significance.

Table 5 (page 30 in the appendix) gave information about an additional side study done with the Metropolitan Achievement Test and the Stanford Achievement Test. The purpose was to see if the two tests both administered to the experimental group were significantly different or if the two tested essentially the same thing. The degrees of freedom were again twenty-three. The .05 level of significance was used. Both skills and information proved not to be significantly different for the two achievement tests. The two achievement tests were testing about the same things in social studies skills and social studies information. The two tests were matched within the experimental group based on the same students taking both tests.

Table 1

Results Of T-Test For Two Related Samples

Metropolitan Achievement Tests

Problem	Degrees of Freedom	Mean of Low Grouped	Mean of Non-Grouped	T-Test Result
Information Achievement Social Studies	23	1.017	0.592	-1.556
Skills Achievement Social Studies	23	0.621	-0.204	-2.131

Table 2

Standard Deviations For The Related Samples

Metropolitan Achievement Tests

Problem	Standard Deviation Grouped (Low Achievers)	Standard Deviation Non-Grouped
Information Achievement Social Studies	0.859	1.085
Skills Achievement Social Studies	1.248	1.425

Chapter 5

SUMMARY AND CONCLUSIONS ON ACHIEVEMENT GROUPING

SUMMARY OF HYPOTHESIS, METHOD, AND FINDINGS

It was hypothesized that students of low achievement in social studies, placed in a special class would improve at a greater rate in seventh grade social studies than students of the same sex and intelligence in a regular or random classroom.

The students were in junior high school seventh grade social studies. The school was the Junction City Junior High School, part of the Geary County School System in Junction City, Kansas. The problem of transient population from a nearby military base reduced the number of students to be used in the study because of available data.

The grouping in the school was done in an effort to bring low achiever's achievement level up so they wouldn't have such a difficult time adjusting to the junior high academic program. Special materials were purchased and teachers who wanted to teach low achievement groups were hired. The students were placed by the counseling department as a result of national achievement tests, grades previously received in the subject, and upon the recommendation of their former instructors.

For the purpose of this study the students were matched on sex and I.Q. with a group of seventh graders in ungrouped classes. Twenty-four students were chosen to represent each group. Twelve boys and twelve girls were randomly chosen from both groups.

The Metropolitan Achievement Test (Social Studies) was the test used for the comparison of the matched groups. The Otis-Lennon Mental Ability,

which is a group intelligence test, was used for matching the two groups. The low achievement group also took the Stanford Achievement Test (Social Studies) at the beginning of the seventh and the same test towards the end of the seventh grade year.

The matched intelligence groups gain or loss in achievement in social studies was then tabulated. The tabulation was in both social studies information and social studies skills. The t-test for two related samples was used to determine whether the two groups of twenty-four students differed significantly. The formula for the t-test was:

$$t = \frac{M_1 - M_2}{\sqrt{\frac{N(\Sigma D^2) - (\Sigma D)^2}{N^2 \quad (N-1)}}}$$

The hypothesis was supported for social studies skills at the .05 level of significance. In an additional study the Metropolitan Achievement Test and the Stanford Achievement Test based on the same t-test were found to be testing about the same things in social studies skills and information.

CONCLUSIONS

Achievement for the grouped students was higher in social studies skills. Grouping with special materials and special teachers seems to be beneficial for bringing about faster achievement in social studies skills in the grouped classes. In social studies information the results were not significant but eighty times out of a hundred the grouped classes would produce the greater achievement.

IMPLICATIONS

Many things affect achievement in school in addition to reading, grouping, and the teacher. A few of these things are negative parental attitudes, sensory handicaps, and emotional disturbances, therefore, no test plan alone could be conclusive. It was felt that creating the achievement groups for social studies had helped some of the low achievers, therefore, it was valuable to some students and was continued.

BIBLIOGRAPHY

BIBLIOGRAPHY

1. Billet, Roy O. The Administration and Supervision of Homogeneous Grouping. Ohio State University Press, 1932.

2. Borg, Walter R. Ability Grouping in the Public Schools. 2nd ed. Dembar Educational Research Services, 1966.

3. Cornell, Ethel L. "Effects of Ability Grouping Determinable From Published Studies," The Grouping of Pupils. 35th Yearbook, Part I, N.S.S.E. Bobbs-Merrill, 1935, p. 289-304.

4. Daniels, John C. "Effects of Streaming in the Primary School. II: A Comparison of Streamed and Unstreamed Schools," British Journal of Educational Psychology. Vol. 31, 1961, p. 119-27.

5. Dean, Stuart A. Elementary School Administration and Organization. United States Office of Education, Bulletin No. 11, 1960.

6. Dyson, Ernest. "A Study of Ability Grouping and the Self-Concept," The Journal of Educational Research. Vol. 60, 1967, p. 401-5.

7. Eckstrom, Ruth B. "Experimental Studies of Homogeneous Grouping: A Critical Review," School Review. 1959, p. 216-26.

8. Goodlad, John I. "Classroom Organization," Encyclopedia of Educational Research. 3rd ed. Macmillan, 1960.

9. Miller, W. S. and Otto, Henry J. "Analysis of Experimental Studies in Homogeneous Grouping," Journal of Educational Research. Vol. 2, 1963, p. 81-9.

10. Passow, Harry A. "The Maze of Research on Ability Grouping," Educational Forum. Bol. 26, 1962, p. 281-8.

11. Thelen, Herbert A. "Grouping for Teachability," Theory Into Practice. Vol. 2, 1963, p. 81-9.

APPENDIX

Table 1

Low Achievement Grade Equivalent Scores

Metropolitan Achievement Tests

Student Number	Sex 1= boy 2= girl	6th Grade Inf.	6th Grade Skills	7th Grade Inf.	7th Grade Skills	I.Q.
1	1	4.1	4.4	5.6	3.8	105
2	0	4.4	3.5	4.9	7.1	99
3	1	4.8	4.1	5.4	6.6	99
4	0	4.6	4.7	5.8	4.4	98
5	1	4.6	4.1	5.4	5.2	97
6	1	3.4	4.0	4.3	5.0	97
7	1	3.0	3.2	5.4	4.9	95
8	0	3.4	4.4	5.8	6.6	94
9	1	3.4	4.1	3.6	4.7	94
10	0	4.6	6.6	4.4	6.6	93
11	0	4.3	3.8	4.4	4.9	92
12	0	4.9	3.1	5.4	4.9	89
13	0	4.3	3.8	6.0	3.5	89
14	1	3.2	4.8	3.3	5.0	86
15	0	3.8	3.8	3.8	3.8	86
16	1	7.5	4.4	6.8	4.9	83
17	0	4.3	3.2	6.2	5.3	83
18	1	4.1	3.2	4.4	3.8	83
19	0	4.6	3.5	4.8	2.6	82
20	1	4.3	4.1	6.2	3.8	82
21	0	3.8	4.7	5.6	5.3	81
22	1	3.0	3.2	5.8	2.1	80
23	0	3.3	4.7	4.6	3.5	79
24	1	3.8	-3.0	4.6	-3.5	75

Table 2

Regular Achievement Grade Equivalent Scores

Metropolitan Achievement Tests

Student Number	Sex 1= boy 2= girl	6th Grade Inf.	6th Grade Skills	7th Grade Inf.	7th Grade Skills	I.Q.
1	1	7.6	8.1	9.8	7.1	105
2	0	6.2	5.2	6.6	6.1	99
3	1	6.0	10.0	6.8	8.5	99
4	0	6.6	6.6	8.6	6.3	98
5	1	5.4	10.0	4.6	6.6	97
6	1	7.5	10.0	5.6	10.0	97
7	1	8.1	6.3	9.8	6.6	95
8	0	4.4	3.5	4.3	6.1	94
9	1	4.3	5.3	6.2	5.0	94
10	0	5.4	6.2	6.0	6.6	93
11	0	7.3	6.1	8.6	5.3	92
12	0	4.8	6.1	5.6	5.0	89
13	0	5.6	4.4	4.9	3.8	89
14	1	3.5	5.0	4.8	5.3	86
15	0	6.6	3.8	5.3	6.6	86
16	1	4.7	4.6	3.6	4.4	83
17	0	6.8	5.0	7.5	5.0	83
18	1	5.4	5.3	6.6	5.0	83
19	0	5.4	4.7	6.2	4.9	82
20	1	7.3	4.7	7.0	4.1	82
21	0	4.9	4.4	5.1	4.4	81
22	1	4.1	5.0	6.0	5.3	80
23	0	4.4	4.7	4.4	4.1	78
24	1	4.1	5.0	5.1	4.4	75

Table 3

Low Achievement Grade Equivalent Scores

Stanford Achievement Tests

Student Number	Sex 1= boy 2= girl	September Testing	April Testing	Difference	I.Q.
1	1	4.6	5.9	1.3	105
2	0	4.3	5.9	1.6	99
3	1	4.6	6.7	2.1	99
4	0	4.6	5.3	0.7	98
5	1	5.3	5.8	0.5	97
6	1	4.3	5.0	0.7	97
7	1	6.9	6.7	-0.2	95
8	0	4.2	6.3	2.1	94
9	1	4.3	5.4	1.1	94
10	0	4.9	5.3	0.4	93
11	0	5.4	5.8	0.4	92
12	0	4.9	5.4	0.5	89
13	0	4.6	6.1	1.5	89
14	1	4.6	5.3	0.7	86
15	0	3.9	5.4	1.5	86
16	1	5.0	5.3	0.3	83
17	0	5.2	5.4	0.2	83
18	1	4.1	5.8	1.7	83
19	0	3.6	4.1	0.5	82
20	1	4.8	5.8	1.0	82
21	0	4.6	5.3	0.7	81
22	1	3.5	4.8	1.3	80
23	0	4.3	3.8	-0.5	79
24	1	4.1	3.3	-0.8	75

Table 4

Differences In Grade Equivalent Scores Low and Regular Achievement

Metropolitan Achievement Tests

Student Number	Sex 1= boy 0= girl	Low Achievement Improvement		Regular Achievement Improvement		Difference	
		Inf.	Skills	Inf.	Skills	Inf.	Skills
1	1	1.5	-1.4	2.2	-1.0	-1.3	- .4
2	0	.5	3.6	.4	.9	.1	2.4
3	1	.6	2.5	.8	-2.5	- .2	5.0
4	0	1.2	.3	2.0	.3	- .8	.0
5	1	.8	1.1	.8	-4.6	.0	5.7
6	1	.9	1.0	-1.9	.0	2.8	1.0
7	1	2.4	1.7	1.7	.3	.7	1.4
8	0	2.4	2.2	- .1	2.6	2.5	- .4
9	1	.2	.6	1.9	- .3	-1.7	.9
10	0	- .2	.0	.6	.4	- .8	- .4
11	0	.1	1.1	1.3	- .8	-1.2	1.9
12	0	.5	1.8	.8	-1.1	- .3	2.9
13	0	1.7	- .3	- .7	- .6	2.4	.3
14	1	.1	.2	1.3	.3	-1.2	- .1
15	0	.0	.0	-1.3	2.8	1.3	-2.8
16	1	.7	.5	-1.1	- .2	1.8	.7
17	0	1.9	2.1	.7	.0	1.2	2.1
18	1	.3	.3	1.2	- .3	- .9	.6
19	0	.2	- .9	.8	.2	- .6	-1.1
20	1	1.9	- .3	- .3	- .6	2.2	.3
21	0	1.8	.6	.2	.0	1.6	.6
22	1	2.8	-1.1	1.9	.3	.9	-1.4
23	0	1.3	-1.2	.0	- .6	1.3	- .6
24	1	.8	.5	1.0	- .6	- .2	1.1

Table 5

Results Of T-Test For Grouped Sample

Metropolitan and Stanford Achievement Tests

Problem	Degrees of Freedom	Metropolitan Mean	Stanford Mean	T-Test
Information Social Studies	23	1.017	0.804	-0.932
Skills Social Studies	23	0.621	0.804	0.678

Standard Deviations For Metropolitan and Stanford

Problem	Standard Deviation Metropolitan	Standard Deviation Stanford
Information Social Studies	0.859	0.750
Skills Social Studies	1.248	0.750

GROUPED AND NON-GROUPED ACHIEVEMENT IN SEVENTH GRADE SOCIAL STUDIES

by

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B.S., The Kansas State Teachers College, 1966.

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1972

GROUPED AND NON-GROUPED ACHIEVEMENT IN SEVENTH GRADE SOCIAL STUDIES

Much of the recent controversies over secondary education have centered on the general question of how to organize schools and classes so as to provide best for the individual differences of youth. Grouping by grades of course, is used universally among both elementary and secondary schools. It should be noted first, however, that underlying the problem of grouping is the general issue of whether we should discriminate in American secondary education between students as to their achievement and other characteristics. Some educators have contended that there should not be discrimination other than in the selection of courses according to interests and perhaps future needs, whereas, especially in the recent controversies, many other educators have argued that we should have a definite separation of students according to their achievement. The application of these conflicting points of view in regard to grouping has served as the basis for the following research and findings.

PROBLEM

It was hypothesized that students of low achievement groups would improve at a greater rate of achievement than students of the same mental ability, but higher achievement in the non-grouped classroom.

LITERATURE

Based on overall scientific findings, the knowledge of achievement grouping as a whole is very incomplete. There is such a maze of research and so many different ways of grouping that it is impossible to assess grouping as a whole successfully. To have successful groups it was found necessary

to have changes in methods and materials. The teacher must adapt instructions to the group.

SAMPLE

The students matched with the low achievement group were in regular classes. From the grouped low achievement classes and the non-grouped higher achievers forty-eight students were picked for the sample. They were matched by sex and also intelligence test scores. The study was to see which group improved the most from the end of the sixth grade until the end of the seventh grade. Twenty-four students were chosen to represent each group, twelve boys and twelve girls were chosen from each group. They were matched exactly by intelligence and sex.

MEASURES

The Metropolitan Achievement Test (Social Studies) was the achievement test used for the comparison of the samples. The Otis-Lennon Mental Ability group intelligence test scores were used in the matching of the two sets of samples. The achievement test was given at the end of sixth and seventh grades.

TECHNIQUE

The difference plus or minus in each individual's score from the two achievement testing was determined. Then using a computer the t-test for two related samples was used to determine whether the means of two groups of twenty-four students differed significantly. The level of significance was .05.

FINDINGS

The low achievement group differed significantly at the .05 level in social studies skills. The hypothesis was supported. The information achievement in social studies was however not significant at the .05 level.

CONCLUSIONS

Achievement for the grouped students was higher in social studies skills. Grouping with special materials and special teachers seems to be beneficial for bringing about faster achievement in social studies skills in the grouped class. In social studies information the results were not significant but eighty times out of a hundered the grouped classes would produce the greater achievement.