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A Survey of the Effectiveness of Grouping by Reading Ability at the Elementary Level

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A SURVEY OF THE EFFECTIVENESS OF GROUPING BY
READING ABILITY AT THE ELEMENTARY LEVEL

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

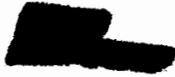
In Partial Fulfillment
of the Requirements for the Degree
Master of Education

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TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM AND DEFINITION OF TERMS	1
The Problem	2
Definitions of Terms	2
Purpose of the Study	3
Background	3
Early American schools	3
The Quincy School	5
Twentieth century education	6
Criteria	7
Scope	9
II. FIVE EXPERIMENTS IN GROUPING	10
Wyoming Experiment	11
First California Experiment	15
Second California Experiment	17
Third California Experiment	20
Vermont Experiment	22
Summary	24
III. SOME CONSIDERATIONS AFFECTING GROUPING	26
The Student	27
The Teacher	28
A Critique of Ability Grouping	30
Summary	37

CHAPTER	PAGE
IV. SUMMARY AND CONCLUSIONS	39
BIBLIOGRAPHY	44

LIST OF TABLES

TABLE	PAGE
I. Comparison of Rate of Main Gain in Reading Level of Experimental and Control Groups by Grade Level Group	14
II. Reading Achievement Scores (Adjusted) After Seven Months	19
III. Raw Score Means for Reading	21
IV. Comparison of Graded and Ungraded Organization for Reading	24

CHAPTER I

THE PROBLEM AND DEFINITION OF TERMS

Organizing students into groups to facilitate instruction has been a common practice in American education for over two hundred years. The most widely practiced procedure used in grouping has been by age. Most students begin the first grade at six years of age, enter the second grade at seven years of age, and progress through high school and college. Originally, this type of grouping was based on the assumption that children of similar ages would have similar intellectual capabilities, hence the reading process could facilitate learning.

The fact that children of similar ages do not necessarily have similar intellectual capabilities has been clearly demonstrated. As Freeman asserts (10:24), it is possible for three children to have the same mental age; yet one may have required twelve years to reach that level, another ten years, and the other only eight years. The realization of this fact has led to considerable experimentation, especially since 1900, in an effort to devise a more equitable procedure of meeting the needs of all students.

I. THE PROBLEM

This study will report the findings of a survey of the literature published between 1962 and 1967. The survey of the literature was limited to grouping by reading ability for the purpose of determining whether or not grouping by reading ability is an effective educational tool which enhances the students' opportunities for achievement.

II. DEFINITION OF TERMS

Definition of the following terms is desirable to simplify the reading of this study. They are: grouping, heterogeneous grouping, homogeneous grouping, and ability grouping.

Grouping. Grouping refers to any placement of pupils in a classroom or instructional situation.

Heterogeneous grouping. Heterogeneous grouping (6:538) is the placement of students in classes irrespective of intelligence, achievement, or readiness.

Homogeneous grouping. Homogeneous grouping (6:538) refers to placement in classes according to intelligence, achievement, and readiness.

Ability grouping. Ability grouping (6:538) means the same as homogeneous grouping.

III. PURPOSE OF THE STUDY

This study focuses upon the ramifications of ability grouping. Too often one is subjected to persuasive and attractive arguments that do not consider both sides of the question. However, if the educator is to be effective, he must have access to factual, unbiased information. His selection of a program of instruction, based on a sound diagnosis of the needs of the students, is a responsibility that must be discharged with scrupulous attention to the merits and liabilities of the programs under consideration.

IV. BACKGROUND

Historically, the grouping of students for instructional purposes has been a characteristic of American education from the earliest dame schools through the one-room schools of the pioneer days to the modern, functional, well-equipped plants of today. Various theories have been adopted or rejected; however, one of the goals of education has been, and is, to better equip our youth to survive and succeed in an increasingly complex society. The following illustrations constitute a brief account of some of the major efforts designed to achieve this goal.

Early American Schools

At a time when religion was a dominant factor in

America, it was deemed imperative that everyone be able to read the Scriptures. Thus, the schools in 17th century America were designed with one purpose in mind: the teaching of reading. This was accomplished in colonial America through the establishment of the dame schools (13:44). These schools were attended by both boys and girls from ages three to ten and were roughly grouped according to the child's achievement in reading. Teachers were obtained locally, and in small settlements were usually widows or single women without means who were sufficiently literate to teach the children the required fundamentals of reading.

With the passage of time more was demanded from education. While reading was still recognized as vital, the ability to write became desirable also, and thus a turn of the evolutionary wheel occurred.

The departmental school (9:3) came into prominence toward the end of the 18th century. This school was open to both girls and boys and could accommodate about 360 students. The name "departmental school" was a result of the physical organization of the building and curriculum into two main divisions: the writing school and the reading school. The school was physically divided into two sections by a partition, and these sections, too, were grouped. The more able students were assigned seats on one side of the room while the less able sat on the other side. Students

attending the departmental school spent half of their day in the writing school and the other half in the reading school, with a separate teacher for each division.

A further manifestation of the changing educational philosophy was the English grammar school (21:1), which appeared during the late 18th and early 19th centuries. This school was an outgrowth of the departmental school but also represented an extension of that school in that entrance necessitated at least a familiarity with the "three R's." Thus, these schools constituted a group by themselves, since students must have attained certain educational levels before entrance was permitted.

The Quincy School

One of the most significant innovations in American education was the graded elementary school. The division of elementary education into two or more classes was common in New England around the middle of the 19th century. The primary difference between these and elementary schools in other parts of the country was that an attempt was made to place pupils into grades according to age or by educational achievement. These schools usually consisted of eight levels of education, after which the pupil was considered adequately educated to become a successful member of the community.

One of the first and certainly the best known of these schools was the Quincy School (13:44). Conceived by

J. D. Philbrick, it was an abrupt departure from the conventional school plan. Founded in 1848, it was the forerunner of the schools that educated several generations of American youth. Radical in design, it consisted of several classrooms contained in a four-story building. Each classroom was heterogeneous, self-contained, and presided over by a teacher who taught all subjects. This plan was widely recognized and accepted by American educators, and within twelve or thirteen years it had become the model for countless schools across the country.

Twentieth Century Education

With the advent of the twentieth century, there was increased concern about the elementary school program. Heterogeneous grouping was still popular, but educators were experimenting with various other plans aimed at improving learning conditions at the elementary level. Partial departmentalization was begun in New York elementary schools in 1912 (9:7). The platoon organization, in which half of the day was devoted to academic pursuits and the other half to special activities, was instituted in Gary, Indiana, in 1908 (9:8). Prevocational classes were begun in the seventh and eighth grades of many schools with the intention of educating students with small academic ability or inclination (9:10).

Later, in the 1920's, the writing of men such as Dewey and Kilpatrick became prominent, and what has been described as the Progressive era emerged. The Progressive era was influenced by the new scientific age and testing was an outgrowth. As a result of a multiplicity of sociological concerns the student, too, began to be considered as an individual rather than as a unit in the common denominator of the classroom. New theories were advanced and new methods employed. One of these theories, and the one with which this study is concerned, was ability grouping, or the homogeneous classroom.

V. CRITERIA

The complexity of problems facing American educators has increased considerably since the establishment of the Quincy Grammar School less than 120 years ago. This nation's population has grown from 17,069,453 in 1840 to 178,464,236 in 1960 (12:322). To keep pace with this single factor, teachers and administrators must constantly investigate new methods and techniques in education in order to ensure that each student receives the maximum possible benefit from his classroom experiences.

Not only are there more students attending school than ever before, but they are attending for a longer period of time. While a generation ago a high school diploma was

considered the young person's passport to compete with the adult world. The space age requires knowledge and skills that were unknown a generation ago, and enrollment in colleges or technical schools has become the aim of more and more high school students. That they succeed in these enterprises is one of the major responsibilities of the public school educator.

Another area of concern has been the unique qualities that make each person, adult or child, an individual. Educators recognize that each child is different from his peers, and must be approached not as a member of a composite group, but rather as a single individual with a distinct and original personality. Consequently, teachers and administrators are attempting to discover methods through which the integrity of this quality of uniqueness may be maintained.

Finally, it has been recognized that the schools are more than agencies for passing on certain fundamental information about reading, writing, and arithmetic. Rather, they must assist the student in his social development, for it is only through interaction with his friends and classmates that he will acquire the skills necessary to function effectively in our society. It is in the transmission of these skills that the school must once again extend every effort to find the best possible program of instruction.

VI. SCOPE

This report is based upon a survey of literature concerned with grouping by reading ability at the elementary level as published between 1962 and 1967. It reports the findings from five experiments in grouping and presents a review of nine propositions derived from related studies of ability grouping practices. The concluding summary is also limited to the five experiments and nine propositions. The reader is, therefore, cautioned against making broad inferences regarding grouping practices other than those which may be specifically derived from the framework of this report.

CHAPTER II

FIVE EXPERIMENTS IN GROUPING

Ability grouping is not a recent development in American education. It had its champions in the 1920's and was popular as early as 1928. It declined in popularity, however, in the mid 1930's, but emerged again in the late 1950's. One explanation commonly offered for its revival was the orbiting of Sputnik I by the Soviet Union in 1957, which set American educators and public alike to wondering whether or not there might be deficiencies in our system of education that could be rectified.

In ability grouping particular attention is often devoted to the students at opposite ends of the achievement spectrum. Low-achieving students and high-achieving students are the focus of much attention. Numerous experiments were conducted, and these experiments resulted in as many different grouping practices. Each practice had its proponents and detractors. Some held that grouping should be based on reading ability; others that mathematical ability was the only logical criterion; many scorned both and grouped students according to I.Q. or creative ability. One observer, in fact, has identified thirty-two separate grouping practices.

The purpose of all the practices referred to in the preceding paragraphs remains the same, namely, to reduce the range of differences in the classroom and enable instruction to be more nearly suited to each pupil. Whether or not ability grouping has succeeded is a matter of considerable debate. However, the basic question remains: does grouping improve student achievement?

Five experiments were selected to indicate the effectiveness of grouping by reading ability. They include three experiments in California, one in Vermont, and one in Wyoming. They were selected from respected periodicals with a national circulation and are concerned with information published within the past five years. Articles in which researchers remained impartial were limited, and selection was restricted due to this factor.

I. WYOMING EXPERIMENT (18:280-286)

In Laramie, Wyoming, W. F. Moorhouse performed an experiment to determine whether or not interclass grouping in grades four, five, and six would produce readers superior to those grouped conventionally. Two schools, designated as School A and School B, were engaged in the experiment. Each school consisted of two fourth grade classes, three fifth grade classes, and two sixth grade classes, with seven teachers assigned to instruct them. Each school had a total of 189 students participating in the experiment.

The students in School A (the experimental group) were ranked on the basis of their reading level as measured by standard reading tests (unnamed). They were divided into seven groups with the pupils having similar levels of achievement placed together regardless of grade. Each group was given fifty minutes of reading instruction per day, and was taught by one of the seven regular teachers. The balance of the day was spent in regular classes.

The students in School B (the control group) were not assigned to the interclass groups but remained in their graded classes for the fifty-minute reading period. Their class organization, other than for reading, was the same as in School A. The teachers at School B were free to set up intraclass groups as they desired using the same test data as School A.

The students in School A were told that they were being assigned to reading groups where they would make the most progress. They were further told that they would not receive grades for reading, but that a written report on their work in reading would be sent to their parents at the end of each semester.

The students in School B were urged to work very hard as they were being tested to see if they could make more progress than the students at School A. They were told that the students in School A were being taught in a different way as part of an experiment.

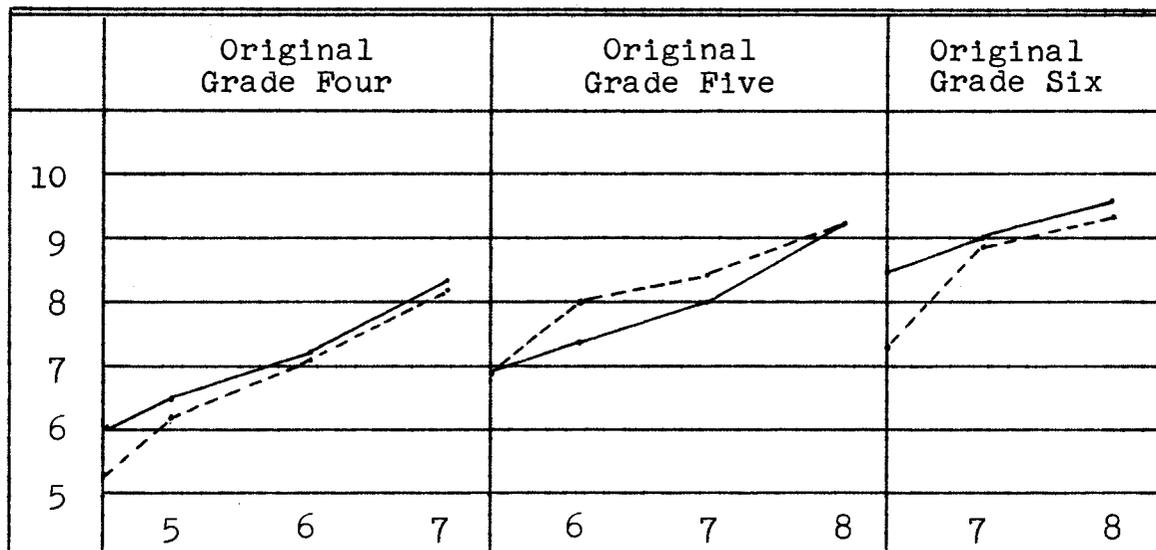
Except for the original sixth grade, which was not tested after leaving grade eight, the progress of the students in both schools was evaluated at the end of the first, third, and fifth semesters. (See Table I) Standard reading tests, again unnamed, were the means of evaluation. The results at the end of the first semester indicated that the reading gains of the experimental group were double those of the control group. At the end of the third semester the reading level differences were still significant at some levels but the reading level gains of the experimental group over the control group were not significant. The fifth semester evaluation indicated that the differences had diminished. The pupils in the experimental group did not show significant gains in reading level over the students in the control group.

Moorhouse concluded that the gains in the first semester occurred when grouping was new and unique. However, when teacher and pupil interest waned, the reading level gains of the pupils in the experimental group were no more than, and sometimes less than, the pupils in the conventionally grouped classes. He contends that when a group of pupils is reading below its measured potential, interclass grouping serves to bring the group to its measured potential. However, when a group of pupils is reading at its measured reading potential, the initial accelerated gains are later

offset by decelerated gains and little if any influence of interclass grouping is apparent.

TABLE I

COMPARISON OF RATE OF MAIN GAIN IN READING LEVEL OF EXPERIMENTAL AND CONTROL GROUPS BY GRADE LEVEL GROUP



——— Control Group
 - - - - Experimental Group

Moorhouse claims no disadvantage in interclass grouping for reading as far as pupil progress is concerned. However, he cautions that the extra time involved in organizing groups and changing rooms may make it undesirable.

II. FIRST CALIFORNIA EXPERIMENT (5:38-43)

The Joplin Plan, named for the city in Missouri where it had its inception, has become nationally known. Devised as a method of equalizing the differences in reading ability of students at the same grade level, it has been incorporated into the curricula of many school districts throughout the country.

The Joplin Plan divides pupils in grades four, five, and six into groups according to their reading achievement, and they attend separate reading classes on the basis of this grouping. Each class may have pupils of different ages, but all will be at approximately the same level of reading achievement. When the plan was initiated in Joplin in 1952, the average gain in reading achievement after four months was 6.5 months for grade four, 8.7 months for grade five, and 13.5 months for grade six. Further, it was found that parents and teachers reacted positively to the plan.

In an effort to ascertain further the effectiveness of the Joplin Plan, Carson and Thompson made a study of 250 fourth, fifth, and sixth-graders at the Sebastapol Union School District in California. They used a control group, which had a mean I.Q. of 107.81, and an experimental group, which had a mean I.Q. of 106.67. Students in the experimental group were placed in one of five reading classes

according to reading test scores, teacher judgment, cumulative record data, and previous test results. Students in the control group were teacher-placed in one of three reading groups in a traditional classroom reading program.

In the experimental group, each student had a regular fifty-minute reading period daily in his assigned class, and a twenty to twenty-five minute recreational reading period daily in his home classroom. No conventional marks were given, and students were able to go from group to group depending on their needs and reading level. However, the teachers of the experimentally grouped children found that they had to have reading groups within the special reading classes even though the reading ranges were small.

For evaluation of the Joplin Plan, Carson and Thompson compared reading gains of the experimental and control groups. Both groups showed gains of greater than one year in total reading, reading vocabulary, and reading comprehension. They found no significant differences between the two groups in reading gains, and no significant differences between the two groups for fast and slow readers.

Upon interviewing the teachers of the experimental group, Carson and Thompson found that they were favorably disposed toward the Joplin Plan. They felt that it challenged the students to do better and that the pupils' attitudes were good, but that it was difficult for slow

readers, especially in the higher grades, to accept the plan. They believed that progress reports to the parents were more desirable than report cards. However, they also felt that the plan was not flexible enough and that there were too many children in the top group.

The majority of pupils involved also liked the Joplin Plan and felt that their parents did, too. Upon closer examination, the experimenters found that just three out of 127 parents felt that the plan should be dropped.

While test results do not support the contention that the Joplin Plan is more effective than a traditional reading program, Carson and Thompson do not believe that it is without merit. They cite the favorable attitude of teachers, parents, and pupils toward the plan as important factors to be considered when adopting a program of reading instruction.

III. SECOND CALIFORNIA EXPERIMENT (4:413-414)

An experiment in Monterey, California, involved five schools in the Monterey City Elementary School District. M. M. Berkun performed the experiment to test a program of homogeneous grouping by reading ability within grades. His purpose was to evaluate the effect of such grouping separately for those initially above or below their grade mean.

All of the third, fourth, and fifth-graders in the five schools participated in the experiment, which ran from September to April. The experiment involved nine control grades and six experimental grades. The experimental group consisted of two third grades, one fourth grade, and three fifth grades. Each of these grades was formed into three classes at each school with a resulting total of forty-five classes participating. The control group consisted of two third grades, one fourth grade, and three fifth grades. Students in the control group attended their regular classes which included a conventional reading program with intra-class grouping. Students in the experimental group also attended regular classes but were assigned to interclass reading groups on the basis of their reading ability.

All students participating in the experiment were given Form W of the California Reading Test for grade placement in September. Form X of the same test was given again in April to measure the achievement of the experimental and control groups. To overcome statistical obstacles of unequal achievement levels among schools, uneven class size, and unequal numbers of experimental and control classes at the various grade levels, each pupil's April score was adjusted on the basis of the September testing.

Results of the experiment (Table II), indicated an overall net advantage for the experimental group of 0.4 year

reading level achievement over the control group. For the total groups, grades three and five in the experimental group showed a significant advantage over the control group but grade four showed no effects.

Berkun did not state any conclusions he may have reached concerning his experiment.

TABLE II
READING ACHIEVEMENT SCORES (ADJUSTED)
AFTER SEVEN MONTHS

	<u>Experimental Group</u>		<u>Control Group</u>	
	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>
<u>Third Grade</u>				
Initially High	70	6.2	15	6.2
Initially Low	95	4.3	29	4.0
Total	173	5.1	150	4.8
<u>Fourth Grade</u>				
Initially High	17	7.7	106	7.5
Initially Low	20	5.3	117	5.6
Total	40	6.5	335	6.5
<u>Fifth Grade</u>				
Initially High	117	8.9	23	8.7
Initially Low	97	6.9	23	6.3
Total	228	8.0	172	7.4
<u>All Grades Together</u>				
Initially High	204	7.9	144	7.6
Initially Low	212	5.6	169	5.4
Total	441	6.7	657	6.3

Note: Totals include cases tied with their grade means, which are excluded from the high and low analyses.

IV. THIRD CALIFORNIA EXPERIMENT (3:108-17)

A Southern California community (unnamed) experimented with three kinds of grouping to determine their effect on achievement in reading and arithmetic. Barlow and Ruddeii conducted the experiment which compared heterogeneous grouping, homogeneous grouping, and cluster grouping. Heterogeneous grouping and homogenous grouping have been previously defined; cluster grouping is the placement of high and average children together to reduce "snobbishness" among the higher children and the placement of average and low children together to provide "spark" for the lower children.

The purpose of the experiment was to compare the growth and achievement between homogeneous, heterogeneous, and cluster plans for elementary age children of high I.Q. and low I.Q. The tests administered to the children as a basis for grouping were: the Metropolitan Achievement Tests, which were administered in October; the California Test of Mental Maturity, which was administered in January; and Form A of the Metropolitan Achievement Test, which was administered in June.

All of the sixth-grade students in the four schools involved in the experiment participated. Those in the cluster groups were placed there on the basis of their I.Q.'s plus the judgment of the teacher. One teacher had high and average I.Q. children, but none judged to be unstable. One

had average and low I.Q. children, including those considered problems. Students in the heterogeneous groups were assigned to classes as randomly as possible. Those in the homogeneous groups were in a school that was using this type of instruction for the second consecutive year. Placement in groups was the result of achievement test scores and teacher judgment.

Results of the experiment (Table III) were obtained by subtracting the October achievement test scores from the June achievement test scores. The difference was considered the growth raw score for the year.

TABLE III
RAW SCORE MEANS FOR READING

	Homogeneous Grouping	Cluster Grouping	Heterogeneous Grouping
High I.Q.	3.27	3.68	5.65
Middle I.Q.	6.00	4.14	5.90
Low I.Q.	6.05	6.11	4.29

Barlow and Ruddeii reached two major conclusions as a result of their experiments. First, they concluded that homogeneous grouping to improve reading achievement did not succeed. In fact, the homogeneous grouping plan resulted in less growth in reading (though the difference was not

significant) than the heterogeneous grouping plan. Second, they concluded that the teaching in these schools seemed to be aimed at the middle ability groups, regardless of the grouping plan used. This finding is inconsistent with the assumptions upon which the cluster and homogeneous grouping plans are based: namely, that the teacher can plan and teach more effectively with a narrower range of ability in the classroom. Growth seemed to be related primarily to initial knowledge and was not a direct result of the grouping method used.

V. VERMONT EXPERIMENT (15:317-321)

Kierstead conducted an experiment in grouping for reading in the Addison-Rutland School District in Vermont. The purpose of the experiment was to compare and evaluate two forms of organization for the teaching of reading. The experiment ran for eight months (September 15 through May 15) and included the third through the eighth grades.

Kierstead used two groups in his experiment. One group was organized traditionally and consisted of intra-class groups formed according to reading ability within each grade. Assignment to a group was primarily on the basis of teacher judgment, and standards, materials, and methods were differentiated within grade levels. The second group was organized into interclass reading groups, with grade lines

entirely removed. All reading classes throughout the school were scheduled at the same time, and students of similar ability met together for reading instruction. Students were assigned to this group on the basis of reading ability, I.Q., and teacher judgment. A total of eleven groups were established, and standards, materials, and methods were adapted to the reading levels.

All students participating in the experiment were tested at the beginning and again at the conclusion of the experiment. Tests employed were: the Pintner General Ability Test (non-verbal), grades three through eight; the Iowa Test of Basic Skills (Form 1), grades three through eight; and a student evaluation sheet, ungraded, grades seven and eight.

The results of the experiment (Table IV) indicated that there were no significant differences between the gains made in vocabulary skills and reading comprehension by the two groups.

Kierstead concluded that classifying students by ability cannot in itself remove individual differences or the need for adapting instruction to individual differences. He states, however, that teachers prefer the ungraded structure due to the narrower range of abilities in the classroom, which results in an easier teaching assignment. Further, he maintains that parents and students accept ability grouping

provided that communication between the school and home is positive and effective.

TABLE IV
COMPARISON OF GRADED AND UNGRADED
ORGANIZATION FOR READING

Structure	I.Q., Classes	N	Vocabulary Skills, Mean Gain or Loss*	Reading Comprehension Skills, Mean Gain or Loss*
Graded	Exceptional	3	13 mos.	8 mos.
Ungraded	130-above	3	1.6	15
Graded	Above Average	51	12	9.7
Ungraded	110-119	44	9.2	8
Graded	Average	87	9	8
Ungraded	90-109	41	9.9	7
Graded	Below Average	13	7.5	5
Ungraded	70-84	14	6.4	6
Graded	Exceptional	2	4	-3
Ungraded	69-below	0		

* All scores show gain unless indicated as loss by negative sign (-).

SUMMARY

This chapter has reviewed five experiments in the grouping of elementary children by reading ability. The researchers in four of the experiments concluded that ability grouping did not increase student achievement; the fifth researcher found a slight advantage for two of the three

classes tested. However, the experiments indicated no major disadvantage in ability grouping, and two were concluded with statements citing the favorable attitude of teachers toward the plan.

CHAPTER III

SOME CONSIDERATIONS AFFECTING GROUPING

The question of how all students should be grouped has never been answered to the satisfaction of all concerned, nor is it likely that it will be. The plethora of opinions regarding grouping and the varying conditions within each school district do not place a single solution to the grouping problem within the realm of probability. Shane has identified some of the problems encountered in establishing a sound grouping program, which include:

1. Lack of explicit and reliable data pertaining to individual children;
2. Pupil turnover which may result in incomplete information on new entrants;
3. Uneven growth patterns of individual children;
4. Uneven social and academic profiles of most children. Many children vary in achievement by as much as a year from one subject area to another;
5. Differences in the philosophy, experience, and competence among teachers in the same building;
6. Personnel resources which may "make or break" grouping plans (6:536-37).

These and other problems must be carefully scrutinized and their possible solutions evaluated before a grouping plan may be adopted. The desirability of the plan must be weighed in terms of its value to the students and its

implementation by the teacher who will employ the plan with a specific group of children.

I. THE STUDENT

The most important element in the classroom is the student. Because of the student the teacher is there, the curriculum exists, the buildings and playgrounds and buses are provided. Educators extend an invaluable service to their students, that of providing a large part of the education and social instruction necessary for them to take their places as adult members of the community.

What is required of an adult member of the community? Certainly more than a mastery of reading, arithmetic, language, and the other subjects in the curriculum. Today's student leaves high school to enter a world of increasing complexity and change. He must be prepared to live in this world, to understand it, and to succeed in it.

How does the student master these skills? Many of them are acquired through the medium of the schools. At school he begins to function as a member of a group that does not include his family; he learns the value of cooperation, fair play, group effort. He will be exposed to ideas and values that are not part of his home environment, and will learn to make his own judgments regarding these values. The days of the small school district, where the mores of

the community were imposed on the school are rapidly giving way to the large, suburban, consolidated school district that is not community-dominated. The gap, in large part, must be filled by the school.

II. THE TEACHER

Any plan for the grouping of students must necessarily consider the effect of the plan on the teacher. If he is to realize his potential as an effective and able educator, it is desirable that he teach under those conditions consistent with his methods and ideals. Since it is recognized that no single plan will prove most acceptable to all teachers, selection of any grouping procedure should take into consideration factors such as research related to various grouping practices.

How do teachers feel about ability grouping? Many teachers and administrators agree that it is an efficient administrative device (19:21). Teachers sometimes believe that instruction becomes easier with a narrower range of ability in the classroom. They believe that they are able to use their time more effectively when relieved of the necessity of providing for an ability spectrum that ranges from the low to the high or very high. Assignments can be more closely tailored to the level of the group, results may tend to be more uniform, and the instructional pace can be

adjusted to the range of ability within the classroom.

Indications are that a teacher's preference for ability grouping often depends upon the level of the group which he is teaching (20:19). Pilch noted that most of the teachers he interviewed preferred teaching a high group and were reluctant to change to a lower one. This can be a most difficult obstacle to overcome if, as happens in many school districts, teachers are expected to move from level to level on a yearly basis. But, if the teachers are "locked" to a certain ability level for an extended period of time, they may tend to identify with that particular level and feel that they are grouped also (24:70). This identification often extends to pupils and parents, who may receive the impression that a teacher of the "low" group is not capable of teaching another level.

That there is frequently considerable resistance to teaching a low ability group is undeniable. Tillman and Hull (24:71) tell of the administrator who has been contacted by some of his teachers' personal physicians requesting, at the teachers' instigation, that they not be required to teach a low group. Many teachers cite their inability or unwillingness to cope with the disciplinary problems that appear more frequently in the lower ability levels (25:531). Others plead that they are temperamentally unsuited to a slower group. Still others, while they do not object to

teaching a low group, feel that grouping itself is undemocratic and unfair to the students.

The preceding are factors that must be brought to light when ability grouping is being evaluated within any program of instruction. Harmony and morale among the teaching staff are important and require serious consideration. However, the single most important factor in any instructional plan is the student. The success of a program must be measured by its effect on the children it is designed to educate.

How, then, does the educator choose a program of instruction? Will it be team teaching, departmentalization, the ungraded school, heterogeneous grouping, ability grouping? These are but a few of the choices available to him. From these he must select the program that best suits his particular needs. The following is a critique of one of these programs: ability grouping.

III. A CRITIQUE OF ABILITY GROUPING

The Indiana Association for Supervision and Curriculum has defined nine propositions concerning ability grouping (6:547-550) that should be reviewed if such a program is under consideration. While the Committee asserts that research on grouping is not conclusive, it does note that "there is a more substantial body of research findings

available than is generally used." Following are the nine propositions defined by the Committee, including research embodied in the Committee's report and research from other sources noted under the appropriate headings.

1. Ability grouping of elementary children by classroom as a device for the improvement of instruction does not in itself produce improved achievement.

One of the common assumptions upon which ability grouping is predicated is that brighter students will achieve more if they are placed in a learning environment that does not include their slower peers. However, the evidence indicates that improved achievement stems, rather, from a variety of other variables such as varied curriculums, wider variety of teaching methods, broader range of materials, and the ability of the teacher to relate to children. Three studies appear worthy of note.

One recent study in New York City concluded that ability grouping of children as a means of securing major improvement in achievement does not succeed. Achievement gains were influenced more by teacher differences and group differences than they were by the ability range or the intellectual ability within the class.

A second New York study (11:482-487) tested the hypothesis that neither the presence nor absence of gifted pupils, nor the range of abilities in any given classroom, nor the relative position of a particular ability level

within the range will affect the attainment of elementary school pupils. The results of the study indicated that some teachers are more effective in handling several ability levels than others are in handling a single ability group; that the groups with the greatest ability spread appeared to be most consistently associated with greater academic gains for all pupils; and that teachers emphasized planned learning activities appropriate to pupils of differing intellectual capacities. The researchers concluded that narrowing the ability range per se does not result in consistently greater academic achievement.

A third study in California (2:28-32) involved a group of four fifth-grade classes and, using results obtained from the Iowa Silent Reading Tests, divided them into four ability levels. The results of subsequent tests showed such wide variation in subtest scores (comprehension, directed reading, word meaning, paragraph comprehension, sentence meaning, alphabetizing, use of index) within the ability groups, that the researchers concluded that classification on the basis of standard test scores does not result in homogeneous groups.

In the same study, a group of sixth-grade classes was tested for reading achievement gains. At the beginning of the experiment, the reading achievement of the homogeneous group was significantly higher than that of the

heterogeneous group. Subsequently, however, the measured growth between the homogeneous and heterogeneous groups indicated that there was no difference in achievement for the two groups.

2. Ability grouping of elementary children by classrooms as a device for the improvement of instruction may be detrimental to the children who are placed in the middle and lower groups.

While it is admitted that the learning climate of a classroom is influenced by a multitude of factors, one that seems to be of considerable importance is what the students within a classroom learn from each other. Another factor is the teacher's attitude toward the class as a whole, which seems to influence their self-perception as students. In a study comparing the achievement between three homogeneously grouped classes, the middle and low groups suffered when compared with matched peers who were in heterogeneously grouped classrooms. The researchers concluded that the absence of higher students in the classroom may deprive the middle and lower groups of the leadership and intellectual stimulation that is provided by the more academically talented children. Further, students grouped into different ability levels seem to be acutely aware of the grouping situation and to identify their groups as high, average, or slow.

3. Ability grouping of elementary children by classroom as a device does not appear to greatly influence the achievement of the brighter children.

One extensive study found that the brighter children seemed to do as well when left in the average and slower groups as they did when members of a high group. As a result of this study, the researchers hypothesized that the brighter children may be receiving sufficient intellectual challenge and stimulation outside the classroom. Consequently, they did not benefit from the accelerated curriculum in the higher ability group.

A second writer (24:71) concludes that the student most often damaged by ability grouping are those in the lower half of the high ability group. This damage is a result of their reduced opportunities to succeed in a learning environment where they comprise the lower portion of the class and may culminate in a reduction in their desire to compete.

4. Ability grouping of children by classrooms using conventional methods, group intelligence test scores and achievement test scores, appears to favor unduly the placement of children from the higher socioeconomic class in the higher ability groups.

Children from lower socioeconomic classes are often penalized as a result of their inability to perform as well on the tests commonly used to group children. As a result, using the results of standardized tests may, to an extent,

group the students along socioeconomic rather than intellectual lines. In one study the children who were found to benefit most from exposure to a high ability group were those from the lower socioeconomic backgrounds. Unfortunately, these are the children who are least likely to be placed in such a group.

5. Ability grouping of children by classrooms may militate against the development of general education skills, those skills which are required of all citizens.

Many of the general education skills and attitudes upon which our society places a great deal of emphasis are best taught through contact with a cross section of the diversity of subcultures which comprise that society.

Ability grouping, which separates students on the basis of a measurable skill or talent, reduces the likelihood that students enrolled in such a program will be exposed to the range of ethnic and cultural differences in our society.

6. Ability grouping of children by classrooms as a device to promote improved academic achievement may establish a milieu which emphasizes the attainment of academic goals at the expense of broader behavioral outcomes.

One study found that ability grouping emphasizes the attainment of academic goals at the expense of attitudes of cooperation and responsible group conduct. Thus, an ability grouped classroom may promote social attitudes which children accept as an integral part of the society to which

they are exposed. Since the environment to which he is exposed in the classroom is influential in determining the student's perception of self, his sense of dignity and worth, and his attitudes toward other children and groups, it seems desirable that this environment emphasize those attitudes that are fundamental to our culture.

7. Ability grouping of elementary children by classrooms reduces differences to a very limited degree.

In a Detroit experiment of some years ago, the results of tests demonstrated that it is very difficult to narrow the differences more than four years in any one subject. Further, if children were grouped according to proficiency in one subject, the differences remained in other subjects since the variations are nearly as great within individuals as among individuals. Another experimenter (24:71) found that ability grouping may even increase the range of ability within the classroom. However, ability grouping may reduce the social-attitudinal differences within a classroom, with the result that one teacher may have a class that is well-ordered and cooperative while another may have one that is uncooperative and difficult to handle.

8. Ability grouping of children by classrooms utilizing mainly group intelligence test scores, standardized achievement test scores, and teacher judgments may penalize students who are quite creative.

Creative potential is not accurately measured on commonly used standard instruments of measurement. Research indicates that the creative child may be placed in the lower groups or encouraged to sublimate his creativity as a condition for admission into the higher groups. In support of this contention, seventy-two children were grouped according to their creative abilities at the Campus Elementary School at the University of Wisconsin (17:137-142). MacDonald and Raths found that the group with the lowest creativity had an average I.Q. of 113.7, while the group with a higher degree of creativity exhibited an average I.Q. of 109.7.

9. It is quite unlikely that any type of grouping of children by classrooms will obviate the need for use of flexible grouping in the classroom.

As the purposes and focus of instruction change, the abilities of the students will necessitate changes in grouping within the classroom. Flexible grouping enables a teacher to provide greater individualization of assignments. The Committee contends that classroom procedures which encourage individualization of instruction stimulate student achievement.

IV. SUMMARY

This chapter has presented a review of nine propositions related to ability grouping. The propositions derived from various studies tend to indicate that ability grouping

must be considered in the light of its advantages for both teachers and students. While many teachers agree that it is an efficient administrative device, certain other aspects of this type of instructional program are not readily apparent. The Indiana Association for Supervision and Curriculum suggests that the nine propositions concerning ability grouping be carefully weighed before a decision to adopt such a program is made.

CHAPTER IV

SUMMARY AND CONCLUSIONS

The practice of grouping in American education is not new. It had its beginnings in the dame schools of early America, where students were grouped according to their proficiency in reading. The practice was continued in the departmental school of the early nineteenth century. In the mid-nineteenth century, the founder of the Quincy School pioneered the concepts of heterogeneous grouping and the self-contained classroom, and his plan became the prototype for schools which educated generations of American students throughout the United States.

The dawning of the twentieth century revealed an increased interest in the problems confronting students and educators. A variety of practices were adopted with an eye toward improving learning conditions at the elementary level. Educators experimented with departmentalization, platoon organization, and prevocational training. The testing movement, too, became a part of the experimental scene in American education. Education had become increasingly complex, and men such as Dewey and Kilpatrick sought to meet the challenge.

No solution to the educational puzzle as described throughout this report is more controversial than ability

grouping. This practice has been both championed and maligned for nearly forty years, and while opinion has always been diverse, there never has been unanimity for any single position.

Ability (or homogeneous) grouping involves the placement of children in classes according to intelligence, achievement, and readiness. It first became popular in the late 1920's, declined in the 1930's, and was revived in the 1950's. The methods of ability grouping are legion; in fact, one investigator identified thirty-two separate grouping practices. However, the most common method seems to be grouping by reading ability, and five recent experiments shed some light on the effectiveness of this method.

An experiment in Laramie, Wyoming, by W. F. Moorhouse was performed to determine whether or not interclass grouping in the fourth, fifth, and sixth grades would produce readers superior to those grouped conventionally. While the results of the experiment indicated that there were gains in achievement by the grouped classes, the gains occurred when grouping was new and unique. However, when teacher and pupil interest waned, the reading level gains of the grouped students were no more than those of the ungrouped students.

Another experiment, this time in California, tested the effectiveness of the Joplin Plan for increasing reading achievement. Two hundred fifty students were divided into

two groups, one being grouped conventionally and the other according to reading ability. At the conclusion of the experiment, Carson and Thompson found no significant differences between the two groups in reading gains.

A third experiment involved five schools in Monterey, California. M. M. Berkun proposed to evaluate the effect of ability grouping for those students initially above or below their grade mean. The results of the experiment indicated an overall net advantage of 0.4 year reading level achievement for the grouped students. However, this gain was limited to the third and fifth grades; the fourth grade showed no advantage for the grouped students.

Another study also conducted in California endeavored to compare homogeneous grouping, heterogeneous grouping, and cluster grouping. All of the sixth grade children in four schools participated. As a result of their work, Barlow and Ruddeii concluded that homogeneous grouping to improve reading achievement did not succeed.

The final experiment as reviewed in this report was conducted at the Addison-Rutland School District (Vermont) and was designed to compare and evaluate homogeneous and heterogeneous grouping. Students in the third through the eighth grades were included. At the termination of the experiment, Kierstead reported that there were no significant differences between the gains made by the two groups.

He concluded that classifying students by ability cannot remove individual differences or the need for adapting instruction to individual differences.

If, as the preceding experiments seem to indicate, ability grouping does not appreciably promote achievement, certain other factors become increasingly important. Its effect on the student in terms of his social, psychological, and intellectual development must be considered. Furthermore, the acceptance of ability grouping by the faculty that must utilize it is of considerable import. In support of this position, the Indiana Association for Supervision and curriculum has defined nine propositions on grouping which deserve careful scrutiny. These propositions include an evaluation of grouping as it affects achievement, general education, social behavior, creativity, and reduction of differences. The tone of the report indicates that there are many serious pitfalls in using ability as a basis for grouping students.

Ability grouping, then, does not seem to be a panacea for all of our educational ills. While it appears to make teaching an easier task through a reduction of differences in some areas, many teachers oppose it on other grounds. Further, and most important, it does not seem to increase the achievement of the students it was designed to aid. The most important element in the classroom for increasing

achievement is undoubtedly the teacher; his philosophy and ability are certainly more important than any grouping plan, however ingenious it may be.

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Required Courses

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Courses in Field of Specialization

Education	487	Group Processes and Leadership
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Education	562	Evaluation of the School Program
Education	585	School Supervision
Education	600	Thesis

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Education	551	Elementary School Curriculum
Education	316	Instructional Materials--Utilization
Education	440X	Modern Arithmetic Workshop
Education	540	Instructional Materials--Production
Education	323	Teaching of Arithmetic
Education	422	Modern Reading Program--Intermediate

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