Effects of ability grouping in the traditional classroom

Mary Wozny
Ability Grouping

The Effects of Ability Grouping in The Traditional Classroom

by
Mary Wozny

A Research Paper Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Education (Reading) At Cardinal Stritch College

Milwaukee, Wisconsin 1990
This Research paper has been approved for the Graduate Committee of Cardinal Stritch College by

[Signature]

(Advisor)

May 14, 1970

(Date)
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Assumptions Regarding Ability Groups</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Clarification of Terms</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Purpose</td>
<td>10</td>
</tr>
<tr>
<td>II</td>
<td>Review of Literature</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Basis for Grouping</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Size and Mobility of Group Members</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Ability Grouping and Student Achievement</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Instructional Practices and Teacher Expectations</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Student Behaviors and Perceptions</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Student Attitudes and Self-Esteem</td>
<td>62</td>
</tr>
<tr>
<td>III</td>
<td>Summary and Conclusion</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Alternatives</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Personal Experience</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Appendix A and B</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>82</td>
</tr>
</tbody>
</table>
Ability Grouping

Chapter One

Introduction

One of the oldest and most controversial issues in education concerns the problem of grouping students for instruction. On one hand, we know that students differ in knowledge, skills, developmental stage, and learning rate. Grouping students by ability seems to be the logical way to deal with these differences so as to provide instruction appropriate to their various levels of readiness. Yet many educators feel uncomfortable in making grouping decisions about children that could have far-reaching effects on them. Assignment to an elementary school reading group is a critical first step in an academic sorting process that may channel some students toward success, some toward moderate levels of achievement, and some toward failure.

Grouping students on the basis of measured or perceived ability is a very common educational practice, especially in the area of reading. In fact, it has been estimated that more than 77 percent of the school districts in the United States use ability grouping. In education, the term "grouping" has a variety of meanings in the various educational settings. However, the term implies some means of grouping students for instruction by ability or achievement to create instructional groups that are as homogeneous as possible (Harp, 1989).
Ability Grouping

Johnston and Markle (1983) cite the ERIC definition of ability grouping as the selection or classification of students for schools, classes, or other educational programs based on differences in ability or achievement. Initial grouping is often done very early in a student's school life. These ability groupings are often based upon information from intelligence tests, achievement tests, teacher recommendations and the teacher's perception of the students' politeness, passivity, and ability to listen and follow directions.

In the 19th and 20th centuries, the practice of ability grouping developed as a response to a series of events: increased immigration from southern and eastern Europe, expanding and deteriorating cities, booming factory-based industry and the decline of homebased manufacturing. Society looked to the schools for help. The expansion of the free public schools was seen as a solution to an array of problems. The solution for schools was to ability group - providing a differentiated curriculum to accommodate the needs of the new immigrants, as well as fulfilling the more traditional functions of providing "high-status" preparation for upper-class students. The problem of educating diverse groups of students, compounded by beliefs about ethnic differences, was met with a solution that relied on a newly coined view of democracy. Ability grouping defined student differences and educational treatments (Oakes, 1986).

In 1929, Purdom was among the first to study ability grouping.
Purdom was unable to find advantages for either high, middle or low groups, nor did students appear to put forth more effort when they were grouped by ability.

During the intervening half century - and hundreds of research studies later - the perception of practitioners that ability grouping is conducive to learning is yet to be verified. Recent researchers acknowledge that conclusions conflict, but agree that the evidence cannot be used to support the assumption that ability grouping aids student's achievement, self-esteem and perception. Furthermore, evidence is shown that ability effects teacher instruction and interaction (Wilson & Schmits, 1978).

Assumptions Regarding Ability Grouping

Grouping of students for instruction is done for many reasons. Slavin (1987) found that most grouping plans exist to deal with one central fact of mass education: that students differ in knowledge, skills, and learning rate. If a teacher is to present a lesson, then it seems that the lesson should not be neither too easy nor too difficult for the students. For the sake of instructional efficiency, it seems that students should be grouped so that they will be able to profit from their lesson.

Johnston and Markle (1983) found that teachers generally believe that grouping students by ability if done fairly, is instructionally effective, makes teaching students at all levels easier, results in
fewer discipline problems, and generates a better spirit of cooperation among students. During a workshop given by Wilson and Schmits (1978) an informal survey regarding ability grouping was given to the participants. The survey shown in Appendix A clearly shows that teachers strongly favor ability grouping. This survey supports the assumptions Johnmon and Markle (1983) reported regarding ability grouping and teachers' perceptions.

Oakes (1986) found that teachers and administrators generally assume that grouping promotes overall student achievement. Teachers feel that the academic needs of all students will be better met when they learn in groups with similar abilities or levels of achievement. This assumption includes the belief that students' capacities to master schoolwork are disparate and that they require different and sometimes separate schooling experiences. Also, bright students' learning is likely to be held back if placed in mixed-ability groups.

Oakes found a second assumption that underlies grouping is that less capable students will suffer emotional as well as educational damage from daily classroom contact and competition with their brighter peers. Slow students will develop more positive attitudes about themselves and school when they are not placed in groups with others who are more capable. Lowered self-concepts and negative attitudes toward learning are widely considered to be the consequence of mixed-ability grouping for the slower learner.
Ability Grouping

It is also assumed that students can be placed in groups accurately and fairly. Placement processes used to separate students into groups reflect past achievements and abilities. Finally, most teachers contend that grouping eases the teaching task and is the only way to manage student differences.

In summary, educators reliance on ability grouping is based on several assumptions: that students learn better when grouped with students academically similar; that low-ability students will develop more positive self-concepts when not forced to compete with brighter students; that grouping decisions can be made fairly and accurately on the basis of ability or past achievement; and that teachers can manage and accommodate students better when placed in homogeneous groups.

Clarification of Terms

Homogeneous grouping: refers to the organization of instructional classes on the basis of students' similarity on one or more specific characteristics. The criterion for this classification may be age, sex, social maturity, I.Q., achievement, learning style, or a combination of these or other variables. Homogeneous ability grouping, therefore, refers to classifying students into separate ability categories and instructional class units (Esposito, 1973).

Tracking: refers to the practice of dividing students into separate classes for high-, average-, and low-achievers. It lays out
different curriculum paths for students headed for college and for those who are bound directly for the workplace. This method of homogeneous placement is usually used in junior high school and senior high school (Oakes, 1986).

**Heterogeneous grouping:** an instructional class which reflects a rich mixture of children who differ on a variable or set of variables. Heterogeneity may be achieved by either randomly, or by deliberately assigning children to instructional classes so that a wide range of individual differences are present. Heterogeneous ability grouping, therefore, refers to the organization of instructional classes so that a rich mixture of children who differ with respect to test performance level is assured. Mixed-ability group is another term used to describe a heterogeneous classroom (Esposito, 1973).

**Cooperative learning:** refers to various instructional methods in which students work in small, heterogeneous learning groups toward some sort of group goal. These groups are expected to engage in a task-focused interaction, such as studying together or completing group assignments. Students are expected to share a broad range of perspectives and understandings to help one another master academic content (Slavin, 1987).

**Purpose**

The purpose of this paper is to review the research literature on ability grouping and report the findings from the standpoint of
Ability Grouping

11

both instructional effectiveness and potential segregative impact. This paper reviews the relationships between ability grouping in schools and the following variables: the basis for grouping; the size and mobility of group members; the effects on student achievement; teacher expectation and instruction; student behavior and perception; and student attitude and self-esteem.

Questions approached in the research of this topic were:

1. Does assignment to a particular group dictate instructional methods and standards?

2. Do some ability groups limit the way students can establish competence and achieve?

3. Do all students receive the same opportunities to learn or is there an inequity?

4. Does ability grouping affect the learning climate in a classroom and affect self-esteem?

Another purpose of this paper will be to explore alternative methods to ability grouping. Educators are urged to promote approaches to grouping that are more equitable and instructional strategies that not only accommodate a wide range of individual differences, but also capitalize on these differences to enhance the learning potential of all students.
Ability Grouping

Chapter Two

Review of Literature

Basis for Grouping

Barr (1975) examined the decisions teachers use when they group for reading and phonics. Grouping decisions may be influenced by the availability of instructional materials: teachers in the suburban schools who had workbooks for phonics grouped their students, whereas those teachers in the urban schools who used board work or dittos provided the same lesson for the whole class. A second influence Barr noted reflected teacher values. When asked about the reading materials and the methods they found most effective for teaching reading, teachers who only grouped children for basal reading mentioned word lists, interesting stories, listening centers, and student-written stories.

Class size also seems to have some influence on grouping practices. Grouping is done more often in larger classes. In her study, Barr (1975) compared two schools. In school I, classes were small and the students were instructed as a total class. In school II, classes were larger and the children were instructed in small groups. Perhaps it is not so much the number of students, but their range of abilities that influences a teacher to use ability groups. School I had more students that were academically similar, whereas School II had a wider range of students — those expected to succeed as well
Rachlin (1989) reports that classes are usually divided into fast, average, and slow groups by the time students reach the middle school and high school. Students are assigned to these groups, spending their entire day with others of similar abilities.

Haskins, Walden and Ramey (1983) presented teachers with 11 cards that named types of information they could use in assigning students to ability groups. The teachers were asked to arrange these cards in order from most to least important in making group assignments. Results indicated that the teachers' own informal observations of the child's ability and teacher-made tests were very influential in teachers' thinking as they assigned children to ability groups.

Teachers are likely to establish groups of approximately the same size in order to distribute instructional time fairly equally across students (Hallinan and Sorenson, 1983). If groups are unequal in size, a teacher may be faced with greater problems of inattention and discipline in the larger groups. Limited instructional materials also may prevent a teacher from forming one large group and a number of smaller groups. If students are assigned to the same group for more than one subject, equal size groups may ease management problems and increase teacher flexibility and control of time. Groups of equal size increase student mobility within the classroom since students can be relocated in groups without having to move desks and
materials. In some cases, the physical layout of a classroom affects forming either very large or very small groups.

In summary, educators use a variety of methods when grouping students for instruction. Research has shown these factors influence student placement in ability groups: the availability of instructional material; the teacher's method of instruction; the size of the class; the academic ability found in the class; and to eliminate management problems in the classroom.

Size and Mobility of Group Members

Becoming a Nation of Readers (Anderson, Hiebert, Scott & Wilkinson, 1985) summarized findings of the Commission on Reading. This commission reported that virtually all primary teachers and many middle-school teachers divide their students into reading groups, most often three groups of high-, average-, and low-ability students. Reading groups are kept small to make it easier for the teacher's management. Once placed in a reading group it is difficult for a child to move from one group to another within the school year. Since most teachers form their reading groups at the beginning of the school year based on the children's standing of the previous year, changing groups from one year to the next is also difficult. It is a sad fact, but often too true that, "Once a bluebird, always a bluebird."

Hallinan and Sorenson (1983) found that most teacher's rationale for ability grouping is that students are easier to manage and keep
attentive in smaller groups. We would then expect the ability groups to be small and homogenous. However, several structural and organizational factors hinder teachers from creating groups with these characteristics. Constraining elements, such as class size, the ability distribution of the class, the classroom physical layout, the instructional organization, the task and reward structure, curriculum requirements and the organization of student's time, all affect the student's education. These factors are also believed to constrain the size and number of ability groups in the classroom, as well as ability group homogeneity.

Hallinan and Sorenson suggest that ability groups should be flexible arrangements of students that permit student mobility across groups over a school year since some students are likely to be misplaced in the initial assignment to a group. They also believe that students learn at different rates, which is another important factor to promote student mobility.

Hallinan and Sorenson studied the stability of ability groups by examining longitudinal data from 48 classes of elementary school children in Northern California. The classes have the following grade distribution: 10 fourth; 12 fifth; 10 sixth; 5 seventh; 7 fifth-sixth; 1 third-fourth; 1 fourth-fifth; 1 sixth-seventh; and 1 third-fourth-fifth.

Information on the instructional groups in the 48 classes was
obtained from the reading and mathematics teachers six times over the school year. The teachers were asked to provide the names of students in each reading and mathematics group at each data collection, to report the basis on which students were assigned to groups and the percent of instructional time the students spent in these groups.

An investigation of the frequency with which students were grouped for instruction in the 48 classes in the sample showed that instructional grouping for reading is fairly extensive while it occurred less often for mathematics. Students were grouped for reading in 34 of the 48 classes (71%) while groups for mathematics occurred in 21 of the classes (44%). These results show that instructional grouping is a popular method of arranging students for instruction, especially in reading.

Almost all of the reading and mathematics teachers who grouped their students for instruction reported that the groups were formed on the basis of similar ability. The test scores of the students in the reading groups give clear indication that ability was the basis for grouping.

Data collected also showed that the classes typically had three ability groups throughout the school year. If change did occur, it was expected to be in the direction of a more even distribution of students across ability groups. The results of the data collected
showed that in more than half of the reading and mathematics groups no change occurred in the size of the ability groups for a semester or more. The stability of these groups suggest that once groups are formed, it is easier to keep the group the same size than to reestablish groups of different sizes.

Hallinan and Sorenson concluded that regardless of the ability distribution in a class, teachers tend to create three instructional groups. Despite factors that promote student mobility, little actual movement from one group to another actually occurs. A result of instructional group stability is that grouping may lose its advantages for some students whose learning rates differ from others in the same group.

Eder (1983) studied ability grouping in a first-grade classroom in order to increase her understanding of the factors that influence ability group formation and maintenance.

The subjects Eder observed were 24 first grade students, 13 males and 11 females, who were from middle-class backgrounds. Observation of the classroom and interviews with the teacher were used to collect information about group formation. The classroom was observed twice a week for the duration of the school year. Interaction during ability-group lessons was also observed and videotaped during this period to examine group differences. Formal interviews were conducted in the 9th and 22nd weeks of the year, and
informal interviews took place throughout the year. Reading readiness scores were also obtained from the school records.

Results of this study showed that the number of groups to be formed was determined independently of the students' aptitude since the teacher told her students on the first day of school that she was planning to have four reading groups. During the interviews it became clear that the teacher had predetermined requirements for the size of groups as well as for their number. She explained that seven was the maximum number of students to maintain the attention of the other group members. Assignment to a group was based on the teachers' own observation of her student's ability and interest during the first day of class. The first-grade teacher also had discussions with the kindergarten teacher to get an idea of how the students would be in reading.

The teacher's group structure of four equal-size groups was expected to remain stable. The results showed that the number of groups remained the same throughout the year. No group size varied by more than two students during the year. Higher groups tended to gain members. There was hesitancy to move students to lower groups than to higher groups.

Size constraints influenced membership stability by inhibiting movement into groups which were already perceived by the teacher to be of maximum size. The teacher had reported that a student was reading well and could be moved to the high group, but the high group already
had seven members and she was reluctant to increase the size of
the group.

Eder concludes that size requirements were found to influence
not only initial ability-group assignments, but student mobility
during the school year. Mobility into a different group would almost
always lead to further imbalance in group size. Thus, once assigned
to a group, it is difficult for a student to transfer into a
different group.

Weinstein's (1976) study examined the reading group practice and
its effects on pupil mobility between groups. The investigation of
this study spanned 5 months, from the first week of school through
midyear, in order to test the gap between reading groups.

The study was conducted in three first grade classrooms in a
working-class community of Connecticut. In all, 60 children participated
in the study. Twelve observational visits were made to each classroom
at weekly intervals during the months of September, October, and
January. Reading groups and subject-matter lessons were the two levels
of classroom activities sampled. Measures of pupil reading achievement,
status, self-esteem and test anxiety were administered at the end of
the first month of school and 4 months later. To provide an accurate
account of reading group membership for each child, teachers were asked
to keep a record of initial assignments to reading groups and all
reading group changes made during the first half of the school year.
The data collected showed that ability-based groups for the teaching of reading were implemented during the first week of school in two classrooms and during the third week in the remaining classroom. By the end of September, all the teachers had identified three reading groups in their classroom. Teachers also referred to their reading groups by name or on the basis of which stories had been read. Teachers varied in the extent and direction of changes implemented, with patterns of upward, downward, and virtually no mobility observed. Girls tended to be upwardly mobile more frequently than boys. In all the classrooms observed, middle reading group members appeared to be shifted most often. Therefore, once assigned to a top or bottom group, the chances of remaining in the original group were high.

The status of the reading group has a powerful expression of expectation. For example, the impact of downward mobility within the reading group structure was illustrated by a parent's promise to the teacher that she would punish her daughter daily until she was moved back to the high reading group.

Weinstein suggests that educators examine the formal and informal ways in which the reading group practice affects classroom life. It is not surprising in a system where teachers grow bored with the basal series material as each book is repeated across the reading groups that students in the low group quickly lose interest in a long-awaited
reader as the teacher introduces a newer and more exciting story or text to members of the top reading group.

Grant and Rothenberg (1986) argue that ability groups of different levels provide different social and learning environments for their members. They believe that assignment to a reading group is a critical first step in an academic sorting process that channels some toward success and some toward failure. Grant and Rothenberg believe that once students are placed into a group, they remain members of that group.

The study by Grant and Rothenberg is based on secondary analysis of data that they collected to explore classroom procedures. They completed nonparticipant observations in eight first and second grade classrooms that used ability groups for reading. They examined all reading-group sessions recorded. Each room was observed a total of 15-30 hours over a 4-5 month period. Data was gathered from early fall to early spring.

The subjects were from classrooms located in three school districts. Districts and classrooms were chosen to provide variation in socioeconomic status of students. All subjects were in midwestern communities.

Observational results showed that there was little student mobility in reading group assignments in the 5-6 months that the observations took place. Since test scores were not available,
appropriateness of students' initial assignments to a group and the accuracy of their final group placements were unable to be assessed. Results also showed that 5% of the students did get to change groups. Mobility occurred only in three of the eight classrooms observed. Observations indicated that teachers frequently moved children from one mid group to the other usually for reasons of convenience rather than ability. Grant and Rothenberg suggest that there is a conflict between the practice of ability grouping and providing equal opportunity to all students.

In conclusion, most teachers divide their students into two, three, or four groups for reading instruction. The grouping procedures appear to have taken place in the following manner: during the beginning weeks of school after the teacher makes a general observation of the students abilities and behaviors and after discussion with the previous teacher, then group placement is decided. Research has shown that once a child is placed in a particular reading group, mobility to leave the group is minimal. Research has also shown that perceived ability is not the only criterion for group placement. Factors such as class size and classroom management also contribute to the number and size of the reading groups.

Ability Grouping and Student Achievement

Research has never supported the idea that homogeneous grouping by ability improves student achievement (Johnston and Markle, 1983).
Johnston and Markle believe ability grouping does not result in improved academic performance. When the achievement of students in different ability groups is examined, the general conclusion is that students in the high ability group benefit from the practice and those in the low ability group suffer. Generally, the gain by students in the high ability group is not as great as the loss by low ability grouped students.

Abadzi (1985) wanted to determine if there was an effect on students' achievement when placed in ability groups. Abadzi's study examined and compared the achievement of high-ability students and average students. The subjects consisted of 284 high-ability and 383 regular students, grades 4-6, from eight randomly selected schools in a large Texas school district. The sole criterion for entrance to the high-ability group was a score at or above the 77th percentile on the Iowa Tests of Basic Skills (ITBS). Subjects generally continued in the same ability group throughout their school life. The subjects had taken the ITBS in grades 3, 4, 5 and 6. Ability grouping was made on the basis of the scores at the end of grade 3.

In order to assess treatment effects on different achievement levels, high-ability and regular student groups were each divided into upper, middle and lower performance subgroups using cut off scores. The test score results from the ITBS were analyzed at the student level.
in the form of normal curve equivalents (NCE). Scores of high-ability students showed an increase after a year of ability grouping, but the effect diminished. Regular student scores overall showed a nonsignificant drop. The ITBS scores of all the subjects showed a downward trend through 5 years at school. These results indicate a failure to learn as much as was expected for all ability groups. The scores of higher-ability students declined more than the scores of regular students. The results indicate that ability grouping did not alter the academic performance and achievement of high-ability students and regular students and does not guarantee academic achievement in either high-ability students or regular students.

These results offer little support for complete ability grouping.

Hooper and Hannafin (1988) compared the effects of two methods of ability grouping, homogeneous grouping and heterogeneous grouping, on the learning of increasingly complex concepts using cooperative learning. The three groups used in this study were: a homogeneous high group, a homogeneous low group and a heterogeneous group.

The subjects were forty eighth grade students selected from a junior high school in a rural area. The students comprised approximately equal numbers of mainstreamed males and females from both the top and bottom ability levels of pre-algebra and general math. In the homogeneous high group, four high ability subjects were assigned to each of three groups; in the homogeneous low group, four
low ability subjects were assigned to each of three groups; and in
the heterogeneous group, two high and two low ability subjects were
assigned to each of six groups.

The subjects worked in small groups of four on a computer
driven tutorial. To avoid the effects of prior knowledge, the content
was based on arithmetic concepts that all students of this grade level
should have mastered. The tutorial was comprised of four sections on
symbols. In all four sections, immediate feedback was given
concerning the correctness of each response. To promote cooperation
between group members, the tutorial contained an embedded strategy
that required the students to alternate roles after every five
questions. After completing the exercise on the computer, a posttest
was administered one week later. Hooper and Hannafin then measured
the posttest responses given to factual, recall, application, and
problem solving questions.

As expected, the overall posttest scores of the high ability and
low ability groups were significantly different. The low ability
group scores were substantially lower. However, the low ability
subjects, grouped heterogeneously consistently scored higher on all
sections of the posttest compared to their low ability counterparts
grouped homogeneously. Although the high ability subjects, grouped
homogeneously, achieved slightly greater overall success on the posttest
than the other high ability group in the heterogeneous setting, the
pattern was not consistent over all levels of questioning. The high ability members in the heterogeneous group outscored its counterparts in the problem-solving questions. Low ability students in the heterogeneous treatment showed a 51% improvement in learning over the homogeneous low ability group, while the high heterogeneous members showed a 9% decrease in learning compared to the homogeneous high ability group. The low ability students in the mixed ability group showed improvement in achievement over the other low ability students without a negative effect on the achievement of the high ability students in the same groups. The results indicate that low ability students may quickly model strategies that enhance learning through heterogeneous grouping. Hooper and Hannafin suggest that students in both mixed and high ability groups benefit most from cooperative learning. This study supports the notion that heterogeneous ability grouping may have few negative consequences and significant potential for academic achievement for all students.

Sorensen and Hallinan (1986) focused on the growth of academic achievement of grouped and ungrouped classes. The data came from a longitudinal study of elementary students in 48 classes in Northern California. These classes included 10 fourth grades, 12 fifth grades, 10 sixth grades, 5 seventh grades, and 11 combined grades. Data on a total of 1,477 students with a mean class size of 30.7 was obtained for this study. Schools were selected partly on the basis of racial composition. Achievement and the effect of ability groups were
Ability Grouping

27

measured at the beginning and at the end of the school year in reading and math. Information on within classroom instructional groups was obtained from the teachers of the 48 classes six times over the school year. The teachers were asked to provide the names of students in each reading and mathematics group at each data collection, to report the basis on which groups were formed, and to report the percentage of instructional time students spent in these groups. Reading groups were established for all or a large segment of the instructional time. Teachers explicitly mentioned ability as the criterion used to form ability groups.

The results address how ability grouping affects academic achievement. This involved a comparison of the achievement gains obtained in classes that were ability grouped and classes that were not ability grouped. The results indicated that students in ability grouped classes were exposed to fewer opportunities for learning than students in ungrouped classes. This was likely a result of the smaller amount of instructional time each student received. Sorensen's and Hallinan's findings suggest that ability grouping provided fewer opportunities for learning than whole class instruction and that high ability groups provided more opportunities for learning than lower ability groups. Ability grouping provides the negative effect it has on academic achievement, especially for the students in the low ability groups.
Rowan and Miracle (1983) analyzed the effects of ability group systems on student achievement. They believe that placement in ranked instructional groups has direct effects on educational outcomes and tends to reinforce initial inequalities in school achievement. The subjects for their study came from a large urban school district in Texas that used both "tracking" and within-classroom ability grouping in its elementary schools. "Tracked" students are placed in classrooms with students of similar abilities.

In both the high and low ability classrooms, students were grouped by ability for instruction in reading. Tests were used to determine students' reading levels at the beginning of the year and for movement from level to level during the year. Students were grouped for instruction within classrooms by level, with different levels corresponding to different materials.

Data on students was gathered between September and April of the 1980-1981 school year. Ten fourth grade classrooms were selected for observation. Thirty hours of systematic observations were conducted within each classroom. Other data was gathered from school records, especially report cards.

Both types of grouping arrangements had direct effects on reading achievement, demonstrating that grouping systems reinforce initial inequalities in achievement. Students placed in lower ability classrooms (TRACK) were paced more slowly than students in higher ability classrooms, and since pacing affects achievement, this form of
grouping apparently led to instruction that reinforced initial
achievement differentials. However, in the system of within-class
grouping, group ranking worked in the opposite direction. Students
in lower level reading groups were involved in more direct
interaction with teachers and were paced faster than students in
higher reading groups.

According to Rowan and Miracle, the results once again illustrate
differences between types of grouping systems. In the school system
that was studied, the tracking system apparently worked to the
disadvantage of students in lower ability classrooms. Within-classroom
grouping produced a different result for the lower ability student.
The effect of within-class grouping on pacing suggest that teachers
attempted to bring lower students up to the level of higher achieving
students through compensatory actions. While there was clear
evidence that group rank affected the way students were taught,
different instruction and instructional pacing appears to have
partially compensated for inequalities in reading achievement.

Despite the claim that ability grouping is particularly intended
to benefit low ability students, the usual finding is that there are
achievement losses for slow learners. Weinstein (1976) investigated
the negative effects that low-ability groups have on achievement.
Results indicated that group membership was found to contribute a
significant increment of 25% to the prediction of student reading
achievement at midyear over and above initial readiness differences among the students. In addition, reading group membership is a predictor of midyear performance. The data collected showed that each reading group demonstrated gains in reading achievement by midyear. However, the gains for high group members were significantly greater when compared to low group members. Thus, the lag in reading level of lowest reading group members become progressively greater. In October, the low readers were a half year behind the high readers and by January the gap had widened to a full year. The high ability students tended to become increasingly more visible as achieving students by January, whereas the low ability students tended to be viewed as nonachievers.

In a study already reported on, Hallinan and Sorensen (1983) argue that structural and organizational factors affect the formation and stability of ability groups which in turn affect growth in academic achievement. They reported two important findings on group effects on achievement. First, the impact of ability grouping on learning is seen to depend on the homogeneity of the ability groups. This result may explain the inconsistencies in the literature on ability groups. Secondly, structural or organizational characteristics of a classroom can mediate the effect of ability grouping. Since teachers tend to react to the number and size of ability groups in a classroom rather than attempting to maximize within-group homogeneity,
the potential effects of ability grouping on change in achievement are likely to be weakened. Ability grouping increases the variance in the achievement distribution of a class, implying greater inequality in educational attainment in grouped classes.

Given the assumption that the quality of an educational environment is directly related to the degree to which the experiences encouraged in that environment facilitate the achievement of educational objectives, the issue of whether ability grouping tends to enhance or reduce school learning is of particular significance. A conclusion regarding ability grouping and the effect grouping has on achievement is summed up by Esposito (1973). The major findings of ability grouping regarding achievement are: homogeneous ability grouping shows no consistent positive value for helping students to achieve more scholastically. Among the studies showing effects, the slight gains favoring high ability students is more than offset by evidence of unfavorable effects on the learning of students of average and below average ability. In conclusion, ability grouped class assignment does not enhance student achievement in the elementary school. Esposito concludes that superior students may benefit from ability grouping, but lower ability ranked students may be hurt due to undemanding curriculum and lack of achievement motivation.

**Instructional Practices and Teacher Expectations**

There are differences in the experiences of children in high and
Attention has begun to focus on the events mediating teacher expectation and student performance in the classroom. Alpert (1974) wanted to determine if the teacher used more good behaviors with high ability reading groups or low ability reading groups. The "good" teacher behaviors are defined as those teacher behaviors that experts judged likely to increase student reading performance.

The study was carried out in 15 second-grade classes housed in 11 New York City Catholic schools which served a middle-class population.
Schools were selected in which second-grade students were grouped into classes randomly and into reading groups by ability. The classes were each visited 4 times over a four week period. The data collectors observed and tape recorded the reading group sessions. The purpose of the first visit was to get the students and the teachers accustomed to the observer and the tape recorder. The purpose of the next three visits was to collect data on teacher/nonverbal behavior and to tape record teacher/verbal behavior.

It was found that the teachers in this study generally treated the two reading groups the same, with respect to the amount and quality of reading group time, number of reading group materials, and number of good verbal behaviors. Teachers did show preferential treatment to the low reading group by placing fewer students in those reading groups. Alpert implied that her findings may be a result of using Catholic schools for her study. She felt that many Catholic school teachers are more responsive to the needs of the slow learner. The findings indicated that teacher behavior may not be adversely affected by teacher expectation.

Eder (1981) examined the nature and extent of differences in the learning contexts of ability based reading groups. The focus on teacher-student interaction as well as differences in interaction patterns across ability group levels was observed. The design for this
study involved observations in a first-grade classroom for an entire school year. The classroom was observed an average of three days per week. Observational periods were usually three hours long and included all days of the week and both morning and afternoon sessions. In order to better examine group interaction, 32 reading group lessons were video-taped. The analyses was based on systematic coding of verbal and non-verbal behaviors during reading group lessons.

The results of this study indicated that learning contexts varied across ability groups. While students in low groups were instructed in an environment characterized by disruption from the teacher as well as from other members, high group members were instructed in a much less disruptive environment. Those students who were likely to have more difficulty learning were inadvertently assigned to groups whose contexts were much less conducive for learning. Because students are exposed to different learning contexts when they are assigned to ability groups, their behavior is likely to be differentially influenced in line with their group assignments. The results also indicated that interaction with others is complex; that we are often engaged in a variety of activities during a single interaction. For example, the teacher simultaneously instructed students, managed their inattentive behavior, and allocated speaking turns. Because other activities were performed simultaneously with academic activities, students' academic turns were affected.
In summary, Eder found learning in low ability groups to be different from that in high ability groups. Lower ability groups were found to have more inattentiveness, increased teacher management, and reading turn disruptions and violations. These contributed to lower levels of reading achievement. Although this study was limited to a single classroom, Eder feels that similar results are likely to be found in other elementary classrooms since students are usually grouped on the basis of ability and maturity levels.

The processes by which teachers communicate differential performance expectations to different children were investigated by Brophy and Good (1970). They believe that the teacher forms different expectations for student performance and then begins to treat children differently in accordance with the differential expectations. The children then respond differentially to the teacher because they are being treated differently. As a result, the general academic performance of some children will be enhanced while that of others will be depressed.

The study was carried out in four first-grade classrooms in a small Texas school district which serves a generally rural and lower-class population. However, a large military base located within the school district contributes about 45% of the students in the school in which the observations were taken. Children from the military base tend to be from more urban backgrounds.

The four classroom teachers involved in the study were asked to rank
the children in their class in the order of their achievement. The rankings were then used as the measure of the teachers' expectations for classroom performance for the children in their classes. In each class, three boys and three girls high on the teacher's list (highs) and three boys and three girls low on the teacher's list (lows) were selected for observational study. The observations being addressed in this study were the contact between the teacher and an individual child. Lecture, demonstration and other teacher behavior directed to the class as a group was ignored. Data was recorded by two observers seated at the rear of the classroom.

The results show that children for whom the teacher held high expectations (highs) raised their hands more frequently and initiated more work-related interactions than did children for whom the teachers held low expectations (lows). The highs were called on more frequently to answer open questions, but the teachers initiated more procedural and work-related interactions with the lows and afforded them slightly more response opportunities. Results also showed that there was a larger frequency of teacher criticisms directed at boys in the low group. Males in the low group averaged 8.25 teacher behavior criticisms, as compared with 2.25 for boys in the high group. The highs produced more correct answers and fewer incorrect answers than the lows, had fewer problems in the reading groups, and achieved higher average scores on the Stanford Achievement Test at the end of
the year. They were also given more praise and less criticism than
the lows by the teachers. The data collected showed that the teachers
favored the highs over the lows in demanding and reinforcing quality
performance. When the highs responded incorrectly or were unable to
respond, the teachers were more likely to provide a second response
opportunity by repeating or rephrasing the question or giving a clue
than they were in similar situations with the lows. The teachers were
more likely to supply the answer or call on another child when working
with the lows. Brophy and Good suggest that teachers do, in fact,
communicate differential performance expectations to different children
through their classroom behavior. This different treatment encourages
the children to begin to respond in ways which would confirm teacher
expectancies.

One purpose of Eder's (1983) study was to examine the relationship
between teacher praise and students' group level and academic
performances. The subjects chosen for this study were 23 first grade
students who were primarily from middle-class backgrounds. The
classroom consisted of 13 males and 10 females. In order to get accurate
information for this study the procedures to collect data employed a
variety of methods. Data was collected over an entire school year by
using classroom observation, video-taping, and interviews with the
students. The classroom was observed for 3-hour periods an average of
three days per week. Reading group lessons were video-taped on 8 days
Ability Grouping

Interviews were conducted during the first, fifth and eighth months of the school year. Questions were used to determine the degree of student awareness regarding group differences.

The results indicate that teacher praise corresponded inversely with group level in this classroom, with students in the high group receiving the least praise at both fall and spring observations. Also, medium-high group members received less praise than low group members in the fall and slightly less praise in the spring. This relationship between group level and praise was also found when praise per reader was examined.

When examples of teacher-student interaction were examined more closely, praise was frequently found to occur after student hesitations. Since students in lower groups tended to make more mistakes/hesitations than students in higher groups, who often read an entire page correctly, it is not surprising that lower groups received more praise. In the medium-high and high ability groups, low-standing students in the group received more praise than did the high-standing members in the group.

Because praise was used primarily to encourage students who were having difficulty, the teacher frequently praised low group members and low-standing students within groups. It is important to examine whether teachers are aware of which comparison process is more salient in their classrooms and whether this affects the type and amount of praise they
Teachers may give more praise to low-ability students, despite attempts to minimize across-group comparisons, forgetting that students' perceptions of ability are likely to differ from teacher's perceptions. Eder (1983) found that praise was used more often with students in the low ability group.

The purpose of a study by Allington (1980) was to examine the amount of actual reading of connected text, orally or silently, assigned during classroom reading instruction. The number of words read by children in good and poor reading groups was compared to identify whether the amount of actual reading varies even though the allocated reading instructional time remains relatively similar between groups.

Twenty-four first and second grade teachers from four school districts volunteered to serve as subjects for this study. Observers visited each classroom to observe the reading instruction provided students identified by the teacher as assigned to the good and poor reading groups. From the observations and tape recordings, the number of words read by students during the reading group sessions was computed.

Results showed that good readers on the average read more than twice as many words per session as did the poor readers. Other results were noted that portray the type of instruction that poor readers receive. Poor readers were seldom asked to read silently, either individually or as a group. Also, poor readers' errors were often treated out of context in which they occurred with the teachers commenting on the syntactic or semantic appropriateness of the response.
Allington feels that poor readers do not complete equivalent amounts of reading in context and have fewer opportunities to practice silent reading behaviors. Since one must read to improve and extend reading abilities, this deficit may be a contributing factor in poor readers' underachievement. Although the poor reader seems to have approximately equal amounts of time allocated for reading instruction, less reading is accomplished. Several factors seem to be related to the inequity in amount of reading completed. The use of oral reading with poorer readers contributes to the lesser number of words read. Oral reading is slower than silent reading. In addition, when oral reading, the teacher and often the other students in the group interrupt the reader when errors occur. Poorer readers will need to read more words and larger quantities of material if they are to become better readers.

In a paper by Allington (1983) the differences in reading instruction were emphasized. Allington found that few teachers discriminate against poor readers in allocating instructional time. He has found that some teachers discriminate against the good readers by offering more instruction to the poor readers. Good readers tended to be oriented more to meaningful discussion of stories than that provided to the poor readers. It was also suggested that good readers read about three times as many words per day in reading group as poor readers. Additionally, about 70% of this reading is done silently by
the good readers, but orally by the poor readers. The differential use of oral and silent reading with good and poor readers would seem to result in different criteria for determining adequacy of reading performances. Good readers, for instance, would be more likely to be judged on the basis of their responses to postreading questions, while poor readers would be judged on the accuracy of their oral reproduction of the text. Allington found that teachers interrupt more often following errors in poor reading groups. The poor reader often views reading as a performance meant to please someone else rather than a self-monitoring act. Good readers self-correct the majority of their errors without prompting, while call-outs and interruptions are often used with the poor readers.

Allington stated, in the *Handbook of Reading Research* (1984), that there is a difference in the way reading turns are allocated in reading groups. Teachers seem to follow a fixed pattern with better readers, moving systematically around the group. When reading with poorer readers, teachers are more likely to open each turn for a bid, calling on students to read who are not on task. Poorer readers are corrected and prompted more quickly, more often, and with directions to attend to surface level features of the text instead of text meaning.

Weinstein and Middlestadt (1979) investigated whether students perceive different treatment by teachers of male high and low achievers.
The subjects for the study were 102 first through sixth graders who were enrolled in summer enrichment classes in math and/or computer science. The subjects came from the San Francisco Bay Area and thus represented potentially 102 distinct classrooms. The majority of the subjects were high achievers and of middle-class background. In all, 55 boys and 47 girls were tested.

A three-part questionnaire was constructed. The questionnaire was administered in small groups of 5-10 students on class-release time or after scheduled classes. One part of the questionnaire was to assess the student's perceptions of their teacher's interactions with a hypothetical male high and low achiever. After reading the description of the hypothetical student, the children rated each of the 60 teacher behavior items by circling yes or no.

Students perceived different treatment across one quarter of the teacher behavior studied. Results indicated that lower-grade students saw the teachers as more critical and directive with male high achievers than low achievers. Upper-grade students perceived the opposite results. Other results showed that they felt smart students were given more chances to succeed. An example cited concerned a smart student who was given two days to complete a drawing when everyone else had one day, and his was the drawing then chosen for display. The subjects also felt that if the teacher helped you out a lot you weren't smart and that low expectations are accompanied by low academic demand.
Student-perceived teacher treatment of male high achievers reflected high expectations, academic demand, and special privileges. Male low achievers were viewed as receiving fewer chances, but greater teacher concern.

One can conclude from these results that students do perceive some different treatment by the teacher of male high and low achievers. Teachers provide a shorter wait-time following questions for low achievers than for high achievers. Weinstein and Middlestadt (1979) believe that by not waiting for an answer or for a completed task, teachers can limit the opportunities for a student to perform.

One student described the need for a teacher to wait as follows: "Children have to have their chance - they need the chance to show themselves out . . . . Let them (the children) wait for a while. Let them think for a while."

Weinstein (1976) also investigated teacher-student contact in a study already reported on. In her study, Weinstein noted that the teachers did treat the reading groups differently. The teachers provided more response opportunities to members of the low reading group during the reading group as well as spending more time per student. Low reading group members appeared to be praised more often for their success and less frequently left without some type of teacher feedback. They also received less criticism than highest reading group members. Weinstein found that by midyear, the teachers appeared to be trying even
harder to support the low reading group members with praise and feedback. The teacher often intervened following correct and incorrect answers unabling the low student to get the word/answer on his/her own.

Weinstein also noted that 30% of the low reading group members had no reading turns at all during the period observed in October, whereas all members read out loud once during the midyear observations. The apparent delay in the introduction of reading turns for the low reading group members seems to reflect judged performance differences among the children since all the high reading group members experienced reading turns in October. Performance differences between reading groups were highly evident in October. Lows made significantly more reading errors per turn and gave fewer correct answers than children from the highest reading group. Teachers used words such as "remedial", "trying", and "painfully slow" to describe their work with the low reading group.

Teacher instructional techniques and behaviors with low and high group students was also investigated in a study already reported on by Haskins, Walden and Ramey (1983). Data collected showed that teachers tended to instruct high-group students in an individual setting and low-group students in the group setting. The difference between these settings is that within the individual setting, students had their own materials and were responsible for working toward completion of a task
by themselves. During the group setting, the teachers kept the entire group of students together around a table while teaching them.

Teachers used more control statements to change behavior not directly related to academic instruction (i.e. "Sit down in your seat"; "Look at me.") when working with students in the low group. Results also indicated that the teachers used more than twice as much positive reinforcement with students in the low groups. These results show that students in low groups are exposed to more direct verbal control and more positive reinforcement from teachers. Praise was used more with the students in the low ability groups.

Teachers spent more time providing low group students with direct instruction. Also, the low group received about 50% more drill instruction than high group students. The low group members also received more corrective feedback than high group students. Teachers used more than five times as many statements that corrected a child's error with low group students. Although there were differences in the way the teachers work with the high and low group students, Haskins, Walden, and Ramey felt that there were no group differences in the amount of time wasted - and thereby lost from direct instruction.

Barr (1975) and Rowan and Miracle (1983) found that students in lower groups or classrooms were paced more slowly than students in high groups or classrooms. Results from these studies showed that the teachers treated their students in different instructional groups
Ability Grouping

46
differently and that students in higher groups were treated more favorably than were the students in lower groups.

A more serious drawback identified by the recent studies is that teachers inevitably drop their expectations when they walk into a classroom full of students that are labeled as low achievers (Rachlin, 1989). Teachers begin to see themselves as weeders, getting rid of the students who can't make it, rather than nuterers trying to make all grow to their potential.

In a paper by Oakes (1986) it was noted that instructional time and teaching quality is different for the high and low ability students. For example, all the data on classroom time pointed to the same conclusion: students in high tracks get more; students in low tracks get less. High track teachers were noted to be enthusiastic and their instruction was clear. They encouraged their students to become independent, questioning, critical thinkers. In low track classes teachers were seen as less concerned and emphasized matters of discipline and behavior. Low ability students tend to get a curriculum empty in terms of ideas. These differences in learning opportunities portray an inequity in our education system; those students who need more time to learn appear to be getting less and are being exposed to poor teaching that does not facilitate learning.

The study by Grant and Rothenberg (1986) also investigated the interaction between high and low students and their teachers. Teacher
time with different ability groups was compared. In six of the nine classrooms observed, high groups spent more time in reading sessions than did low groups. Most teachers also engaged in boundary maintenance. Children in low groups were told, "We don't need your attention back here. You'll get to read this story later." In addition, teachers explicitly labeled certain resources as property of the high groups. The high groups had exclusive use of certain tables, games and supplementary materials.

The study also indicated that high groups were no more likely to receive praise than were low groups, although qualitative differences in teacher praise was noted. Low group students were usually praised for turning in "a really good paper - better than yesterday's" or complimented for "learning those words really fast - almost as fast as the top group." These results differ from previous studies which showed that low groups received more praise. However, when one considers quality of praise, the high ranking students appeared to be at an advantage because of the type of praise received. Also, the students in the high groups in five of the classrooms observed received fewer criticisms than those in the low groups.

Grant and Rothenberg feel that there are many advantages for the student in the high group. The major advantage they have observed is that not only do students in the high group cover more material at a faster pace, but they are interrupted less often. It appears that
teachers and students in the high group protect that instructional
time from intrusion and focus more on the task. Grant and Rothenberg
believe that most differences in teacher treatment of ability groups
are motivated by teachers' perceptions about the most appropriate
modes of teaching for students at each level.

Instruction was atomic studied in a paper by Gamoran (1986).
The data was collected from two schools in three school districts in
the Chicago area with a total of twelve first grade classrooms
participating. Each first grade class was divided into small groups
for reading instruction. The classrooms were observed twelve times at
approximately three week intervals over the course of the year.
Information on the social and instructional organization of each
classroom was recorded. In addition, students completed a reading
aptitude test at the beginning of the year and were tested on their
learning in December, March and May. School records and teacher
interviews also provided information.

The results showed that group placement appeared to have a
significant effect on words learned. The higher group learned more
words than the low group. Students varied their performance when
expectations were different. Gamoran found that teachers modified
instruction according to the level of the group. Therefore, learning
is affected as soon as students are assigned to a group. Gamoran
suggests that if we want to understand why some students learn more
than others, in ability groups or in any other type of setting, we should examine the instruction they are being provided.

Hiebert (1983) reports in his paper that teachers appear to vary the amount of time that groups of different levels spend on decoding tasks. Teachers also vary the method of reading according to the ability of the group. While teachers tend to use the same materials with all the groups, teachers do vary the pace at which new material is introduced depending on the ability of the group. Teachers' responses to children's reading miscues have been treated differently depending on the group. Teachers' allowed fewer interruptions when working with their high ability groups then when working with the low ability groups. Hiebert believes that the experience of being in the high group could be very different from that of being in the low group. These different learning atmospheres can create different learning processes for participants, and these in turn can influence learning outcomes.

In conclusions, research has shown that instruction for members in the low ability group differ from the members in the high ability group. With low ability students, teachers emphasized decoding and basic comprehension skills, while flexibility in procedures and assignments and more complex comprehension skills were stressed for high ability groups. Researchers reported that high ability students engage in more meaningful activities, read silently more and have fewer interruptions during instruction. Students placed in a low group are more likely to
be distracted by a peer and therefore have less opportunity to learn than their classmates in the high group. Some of the studies reported different results when reviewing the practices of teacher feedback and praise. The studies reviewed in this paper suggest that there is a difference in teacher instruction and teacher expectation in regards to membership in a group. Research has shown that students tend to perform better when teachers have high expectations of them.

**Student Behaviors and Perceptions**

What classroom factors promote the development of large differences in students' ability perceptions so that some believe in themselves and others feel incompetent? In a study by MacIver (1988), possible answers to this question were tested by examining the relation between certain class environment (task structures, grading practice, and ability grouping) and the stratification of student's self-perceptions. Since it is the intention of this paper to discuss ability grouping, I will focus on the predictor of ability grouping. The criterion being measured was the ability group type dispersion on students' math ability perceptions.

The data was collected as a part of a two year, four-wave longitudinal study. Twelve school districts with varying educational practices were recruited for the project. The school districts were located near a major metropolitan area in the Midwest and served middle-income communities. Almost 90% of the subjects were white.
The total number of participating subjects in the 67 classes was 1,612. The students at the beginning of the study were in either fifth or sixth grade.

Survey questionnaires were administered to the subjects in their math classes. While they completed these questionnaires, teachers filled out an individual assessment battery on each student and a classroom environment inventory. Report card grades were collected from the students' records. Ability grouping practices were measured through teachers' reports. On the basis of the reports, it was possible to classify classes as using no ability grouping (Category A), between-class ability grouping (Category B), within-class ability grouping (Category C), or no ability grouping initially but within-class grouping by the spring of the year (Category D). In the analyses, each type of ability grouping (Categories B, C, D) was compared with the no-ability grouping category.

The results indicated that ability group type was significantly associated with task structure, grade dispersion, and talent dispersion. Undifferentiated task structures were less common when within-class grouping was used, and grade dispersion and talent dispersion were narrower when between-class grouping was used. In classes in which everyone worked on the same text at the same time, stratification of ability perceptions was high only when talent dispersion was moderate or high. Type of ability grouping covaried with each of the
Environmental variables found to have a significant effect on ability perception stratification. When within-class ability grouping was used, teachers tended to provide more differentiated task structures that allowed students choice and autonomy. When between-class grouping was used, not only was there greater homogeneity of students' talent levels in the class, but grade dispersion was also significantly narrower. Although no significant direct effects of ability grouping on ability perception stratification was found, the evidence suggests that ability group type may indirectly contribute to the development of dispersed and consensual ability perceptions by partly determining variation in tasks, talent levels, and grades that are present in the class.

Dembo and McAuliffe (1987) wanted to investigate if there would be a difference in group settings because of status. They used the independent variables of a naturally occurring grade level and an experimentally induced ability group in homogeneous and heterogeneous groups. Dembo and McAuliffe hypothesized that the differences in behavior between homogeneous and heterogeneous groups would reflect a sensitivity to status in the mixed groups that would not be shown by students in homogeneous groups; and that students of higher status, based either on "ability" or grade level, were expected to have more influence on the groups' decisions than students of lesser status. The subjects in the study were 80 white, middle-class male fifth
and sixth graders of similar backgrounds from heterogeneous ability classes in two elementary schools. The subjects were randomly assigned to 20 groups of 4 - 2 fifth graders and 2 sixth graders each. No student from the same class was assigned to a group nor were friends assigned to a group.

All students were given a bogus test entitled "The California Test of Problem-Solving Ability". The treatment for this test consisted of the task, Lost on the Moon, which requires a group to imagine that it has crash-landed on the moon. The subjects were told to order fifteen items remaining from the crash separately and then to complete a group consensus ranking. For both rankings, they could discuss the rankings with each other. They were told they would receive rewards for high scores on the individual and group tasks. The subjects were told that speed, math ability and reading ability were not important in solving the ranking problem.

Ten homogeneous and ten heterogeneous (ability) groups were formed and each group was told either they had equal ability or that two students (one fifth grader and one sixth grader) had higher ability to solve the task than the other fifth grader and sixth grader in the group. The assigned "ability" status of the specific students were identified to all members of the group. A video camera recorded the discussion of the group members. Dembo and McAuliffe then measured the social influence, group interaction and the responses to a postmeeting questionnaire.
The results supported the findings that mixed groups would differ from homogeneous groups. The students in the heterogeneous groups responded positively to help given by an "average" student at a lower rate than did students in homogeneous groups. Students in mixed groups responded negatively to help given by the group at a significantly higher rate than did students in homogeneous groups. This suggests that the differences may be due to ability and status. Social influence results suggest that high status students would differ from lower status students by showing a higher rate of social interaction and producing more initiative behavior. It was also noted that sixth graders gave more help to the group than did the fifth graders. But the fifth graders were not more likely to ask for help than were the sixth graders. The results also conclude that students of higher status would have more influence on the group ranking than would students of lesser status. Students responded more positively to help coming from high status members. In the questionnaire, it was noted that high status students would be chosen more often as a leader and the ideas, efforts and leadership would be rated higher than those of lower status group members. The results of this study support the hypothesis of Denbo and McAuliffe. Grade level and ability had an effect on the interperson perceptions, behaviors and social influence of group members. Subjects high in "ability" or grade status dominated the groups, showed a higher rate of social interaction and exerted greater influence on group consensus.
Research has indicated that the formation of student perceptions can be influenced by the way instruction is organized. Filby and Barnett (1982) examined the perceptions of elementary students regarding which students are perceived as "better readers" in classrooms based on grouping students for instruction.

Data collected came from two second grade classrooms and two fifth grade classrooms in the San Francisco Bay area. All four classes were in middle-class suburbs. The students' population was 90% white. In two of the classes, one at each grade level, reading was taught in a whole-class format. In these classes, all the students used the same reader and participated in the same lessons. The other class at each level had permanent ability-based reading groups. These classes operated on a staggered schedule. In each class there were four reading groups. The two lower groups met in the morning; the two higher groups met in the afternoon. In the fifth grade class, the lowest group used a fourth-grade text published by Scott, Foresman, while the other three groups used consecutive readers from the Ginn reading series. In both classes, the teacher met alternately with one group and then the other. Groups not meeting with the teacher were engaged in seatwork.

Interviews were conducted with 85% of the students in the four classes. Interviews were conducted in March outside the classroom with only the interviewer and the student present. Each interview lasted
About 25 minutes. Students were asked two questions. The first question asked students to arrange their different reading books in order from easiest to hardest. The second question asked students to decide which of two students was a better reader and to explain how they had made their choice.

Results of the interviews showed that whole-class students were less able to order the books accurately. This may be that they are less familiar with the books. Overall, 80% of the second grade ability-based groups could order the books correctly, compared with 62% of the fifth grade ability-based groups. High-ability students knew book order quite well, even in second grade. Low-ability students had not assimilated all of this information, even in fifth grade.

Test performance was overall the most frequent reason given for choice of better reader. Students focused on oral reading performance and gave vivid descriptions of their classmates' performances. Students tended to ignore performance on reading tasks like worksheets. They also ignored the meaning that students get from what they read. Students in classes with whole-class reading relied on task performance to make their choices regarding "better" readers. Students in staggered-grouped classes also shifted to a focus on task performance when asked to compare students in the same group as themselves, that is when group membership no longer distinguished choices. High-ability students used grouping reasons with extreme accuracy, even in second grade. Low-ability
students had more difficulty. Although assignment to groups was the most frequent reason given by students in staggered-grouped classes, still only about half the students cited this reason. This suggests that group membership and instruction is an important factor considered by students but certainly not the only factor. Filby and Barnett suggest that teachers provide activities which foster the self-confidence and participation of low-ability students by differentiating activities so that reading and verbal ability are not the sole criteria for successful performance.

Rosenholtz and Wilson (1980) argue that in traditional classrooms, reading ability is used as a surrogate for perceived academic competence. In their study, they identified a cluster of classroom characteristics, labeled “classroom resolutions”. These resolutions may affect the student’s perception of ability differences.

The sample consisted of 15 fifth and sixth grade classrooms from three schools in neighboring districts of the San Francisco Bay area. Two of the schools were located in suburban areas containing a middle-class white population; the third school was in an urban setting serving a working-class Chicano population. The sample was selected where the principal reported large within school variance in classroom structure. Rosenholtz and Wilson surveyed seven low resolution classrooms and eight high resolution classrooms.

Shared perceptions of students’ ability differentiation can be derived from three sources in the classroom: teacher, self, and
classmates. Data from each of these sources was provided by administering student and teacher questionnaires that assessed perceptions of students' reading differences. The first measure tapped the degree of concurrence among classmates. Students were asked to rank order classmates of the same gender by their ability to read. The degree of concurrence between classmates and self was the second measurement. Peer rankings of individual students were averaged, reflecting a sex-cohort class aggregate for each individual. Self perception of reading ability was determined by the student's placement of self in the rank order. The third measure of shared perception was the degree of concurrence between classmates and teacher. The teachers rated each student, relative to his or her classmates, as above average, average, or below average in reading ability.

Four major findings resulted from this study. First, high resolution classrooms have significantly higher concurrence among classmates of the individual's reading ability when compared to low resolution classrooms. Second, self-ratings are more congruent with classmates's ratings when the classroom resolution is higher. Third, the association between teacher and classmate ratings tends to be stronger in high as compared to low resolution classes. Fourth, students more closely approximate teacher ratings in judging their own academic reputation when classroom resolution is higher. Consensus on an individual's academic ranking is higher among classmates, between
classmates and self, between teacher and classmates, and between teacher and self in high resolution classrooms. The findings suggest that different classroom structures may provide different realities of performance.

Haller and Davis (1981) examined the argument that teachers' perceptions of their students are influenced by the family background, and that these perceptions affect the students' placement in a reading group. Data was collected in 37 fourth, fifth, and sixth grade classrooms in five schools located in four separate school districts in central New York. Data collected consisted of students' percentile scores on the reading comprehension of the Iowa Test of Basic Skills; a measure of the family socioeconomic status (SES) using The Home Index; and recorded teacher comments that were divided into 34 categories.

Results indicated that the correlations between perceptions and students' SES were quite small. Teacher comments most often reflected achievement-related criteria and were generally related to student reading test scores more strongly than to student SES. Therefore, Haller and Davis conclude that most of the effect of SES on reading group placement seems to be indirect. The results lend little support to a teacher-bias argument and does not suggest that SES has substantial influence on reading group assignment.

Weinstein and Middlestadt (1979) also investigated students' perceptions. They found in their study that students perceive the
high-achieving males to be more popular, friendly, competitive, attentive, independent, and successful. The fact that students do perceive differences between male high and low achievers provides evidence that students respond to the instructional setting around them. One can conclude from these results that students do perceive some differential treatment by the teacher of male high and low achievers.

Felmlee and Eder's (1983) study looked at the contextual effects within the classroom by examining the extent to which students' ability group assignments affect their rate of being inattentive. They hypothesized that students in high ability reading groups are expected to have lower rates of becoming inattentive than students in groups of low reading ability.

The subjects used in the study were 23 first grade students. The classroom was located in a medium-size community in California and the students were primarily from middle-class backgrounds. Students were assigned to four, equal sized ability groups during the first week of school. Group assignments were mainly based on the kindergarten teacher perceptions. The reading groups met each day for 15 to 20 minutes of reading instruction. The primary activity for the lesson was oral reading. Data was obtained from 16 video-taped lessons, four lessons from each of the four groups. One-half of the lessons took place during the second month of school and one-half took place during
the seventh month. The data was analyzed measuring the attentiveness of the groups' members.

Results showed that group ability has effect on student attentiveness. In the spring, students in low groups became inattentive at more than three times the rate of high group students. Students in low ability groups could be inattentive because they have less enjoyable tasks to attend to than students in high ability groups. Also, peer modeling can affect attentiveness. A student in a low ability group may be more inattentive than one in a high ability group because his/her peers are more inattentive. Reading turns in high ability groups are shorter and have fewer reading errors than turns in low ability groups. These error-laden reading turns are another factor contributing to inattentiveness. Assignment to a low ability group was found to have a negative effect on student attentiveness. The fact that students who were assigned to low ability groups were more likely to become inattentive than students assigned to high ability groups suggests that students are not being exposed to equal learning environments.

Student behavior was discussed in a study already reported on by Haskins, Walden, and Ramey (1983). Data indicated that the students in the low-group and in the high-group were quite similar with respect to the amount of talk and frequency of requesting attention or help from the teacher. The results also showed that low-group students
were more disruptive and frequently off task. The students in the low groups were off task about 70% more often than students in the high groups. Students in the low groups were eight times as likely to interfere with their peers' academic work. Despite the fact that the teachers found it necessary to control the behavior of low-group students, these students did not resist or ignore the teachers' attempts to influence their behavior more than high-group students.

Student perceptions or self and others are affected by the ability group to which they are assigned. In general, students in higher ability groups are viewed more positively than those in lower ability groups regardless of academic achievement. Low-ability group instruction is often offset by disruptions. Members of low-ability groups are frequently off task. These studies suggest that the student behaviors in high-ability groups are more conducive to learning than student behaviors in low-ability groups.

Student Attitudes and Self-Esteem

Hiebert (1983) reports that for years researchers have studied the relationship between self-esteem and reading group status. Researchers have found that members of low-ability groups were more deprecatory about themselves and their reading ability than members of high-ability groups. Almost all low-ability students expressed a desire to be in high-ability groups, while none of their high-ability peers wished to be in low-ability groups. In most cases average-ability
students and low-ability students give lower self-evaluations if they are in ability groups than if they are not. While this is not surprising, it does lead to the question: How can we raise the level of self-esteem in low-ability students?

Children's attitudes toward reading and also their reading group vary with the level of the group. Hiebert (1983) cites a study that found a significant difference between the attitudes toward reading of sixth-grade students in low-ability and high-ability groups with low-ability children expressing more negative feelings toward reading. Low-ability group members reported significantly more negative feelings about their groups than did high-ability group members.

Johnson and Ahlgren (1986) examined the relationship of student attitudes toward cooperation and competition and self-worth. The study is based on a survey of grades 1 to 12 in an entire midwestern suburban school district. The instrument used to measure student attitudes was the Minnesota School Affect Assessment (MSAA). Two-thousand four hundred students participated in the study and completed the survey.

Results indicated that cooperativeness is consistently related positively to viewing oneself as just as important in school as any other student, as doing a good job of learning in school, and as liking to have the teacher see one's work. Competitiveness begins to have a positive relationship with these attitudes in junior high school, and by senior high school positive self-worth as a student and
Ability Grouping

Competitiveness are related very strongly. Thus the encouragement of cooperativeness among students may be related consistently to the encouragement of positive self-attitudes, while student competitiveness has a strong positive relationship to this attitude in high school.

In a study by Hallinan and Sorensen (1985), they examined the independent variables of membership in the same ability group. The subjects were taken from a longitudinal data set containing information on 1,477 students in 48 classes in ten elementary schools in Northern California. Schools were selected on the basis of racial composition and organizational properties, such as instructional grouping.

Information on the instructional groups in the 48 classes were obtained six times at approximately equal intervals over the school year from the reading and math teachers. The teachers were asked to provide names of students in each group, the basis on which students were assigned to the group and to designate the level of the group at each data collection. Researchers collected data on the children's friendship from the students. At each of the six data collections, the students were given a list of their classmates; after each name on the list were the phrases "Best Friend", "Friend", "Know", "Don't Know", and "My Name". The students were asked to circle the appropriate response for each name on the list. The analysis reported in this paper is based on the children's best friends choices. Three types of analysis were performed to investigate the relationship
between ability grouping and student friendships. Would the proportion of friendship ties within an ability group increase over time? Would the overlap between cliques and ability group membership increase over the school year? Would membership in the same ability group be a significant predictor of the formation of a friendship between two students?

Results of the study indicate that stable instructional groups have a positive effect on friendship regardless of group size and that the pattern is slightly stronger for the larger groups. In larger groups, students are more likely to find classmates who are similar to themselves in characteristics that are salient for friendship. Instructional activities within the group are apt to provide opportunities for interaction and lead to friendship among these students. In smaller groups students are less likely to find a potential friend. The results of the density analysis showed that ability groups become more cohesive over the school year and that the stability of ability groups, regardless of size, is a positive factor in increasing the density of the friendship ties of group members.

Students in large ability groups tended to be incorporated into friendship cliques as the school year progressed. This result suggests that smaller ability groups have a weaker impact on friendship patterns than larger ones. In general, there was strong evidence of an effect of ability groups on student friendships through their impact on the
Ability Grouping

Social network of the classroom. The results support the prediction that membership in the same instructional group has a positive influence on the formation of student friendships. It was also noted that students were more likely to make best friend choices in the lower grades than in the higher grades. The results show a positive effect of membership in the same ability group on making a best friend choice.

One of the arguments made by proponents of ability grouping is that the self-concept of low-ability students suffers when these students are forced to compete against students of higher ability (Oakes, 1985). If this is the case, then one would expect that scores on self-esteem measures would be higher for low-ability students when placed in homogeneous classes. The preponderance of the research, however, fails to support this prediction.

To look at ability grouping and self-esteem, Oakes studied 299 math and English classes in 25 high schools. Of the tracked classes, 75 were high-ability classes, 85 were average-ability, and 64 were low-ability classes. Seventy-five heterogeneously grouped classes were also studied.

To assess self-esteem and attitudes towards school, students were asked to respond to self-concept scales that asked them to indicate their agreement with statements regarding feelings about themselves (i.e. "At times I think I'm no good at all"), how they
saw themselves in relation to peers (i.e. "I'm easy to like"), and how they felt about themselves with respect to academics (i.e. "I'm good at math"). From other checklists and open-ended questions, students' aspirations and future plans were assessed.

Oakes found that students in higher track classes had significantly more positive attitudes about themselves as well as significantly higher educational aspirations than lower-track students. Low track students were more likely than other students to view themselves as not as well liked by other people and as having many things about themselves they would like to change. Results for heterogeneously grouped classes were mixed; some were more likely to resemble average- or high-ability classes on these attitude variables, while others were more likely to resemble low-ability classes.

A study by Abadzi (1985) already reported on regarding academic achievement also investigated ability grouping and the effects on self-esteem. The subjects in the study were given a version of Coopersmith's Self-Esteem Inventory three times during fourth grade and at the end of fifth grade. The test score results from the Self-Esteem Inventory were analyzed at the student level in the form of normal curve equivalents (NCE).

Results showed that high-ability students' scores on the Coopersmith Self-Esteem Inventory tended to rise while regular student scores tended to drop. The results of the self-esteem scores indicate
that status can effect self-concept. The results also indicated that ability grouping does not guarantee academic achievement in either high-ability students or regular students, but self-esteem may drop due to group status.

The effect of within-classroom ability grouping on students' self-concepts has received more attention. In a study already reported on, Eder (1983) also investigated students' self-concepts. The results are taken from observations during ability group instruction where teacher praise was being analyzed. In order to determine if these findings were reflected in students' academic self-concepts at the end of the year, the students were asked eight questions assessing perceptions of their academic performance. A comparison of the average self-concept of students at different group levels with the average self-concept of students who had high or low standing within their ability groups provides important information. The results suggest that while members of the highest ability group had relatively low academic self-concepts, high-standing members within all ability groups had high self-concepts.

When self-esteem scores across and within ability groups were compared, it was found that the low mean for the high group is due to the lower self-concepts of the poorer readers in that group. These students had lower self-concepts than other students. Eder suggests that because the poorer readers in the high group received considerably
less praise than the poorer readers of other groups, it is not surprising that they had lower self-concepts. The results of this study suggest that students' self-concepts can be affected by ability grouping and group placement.

For students with lower abilities, the benefits that come from removing the pressure of having to compete with the class whiz appears to be quickly outweighed by the lower self-image that comes from being in the "slow" class. Rachlin (1989) cites a longitudinal study of Midwestern junior-high students. The study found that when lower-ability students were first placed in a lower math track, their grades and self-image rose. But by the end of the year, they were being expected to spend less time on homework than before being tracked and their standardized test scores had slipped further behind those of their peers. One student told researchers: "I felt good when I was with my elementary class, but when they went and separated us, that changed us. That changed ... the way we thought about each other and turned us into enemies towards each other - because they said I was dumb and they were smart."

In conclusion, ability grouping tends to cause friendships to develop within ability groups and does not encourage contact and friendships between the different ability groups. These friendships can affect the attitudes students have toward each other and in turn can affect self-concepts among the different ability groups and among peers.
A persistent concern about ability grouping is its effect on the self-concepts and attitudes of children, especially those placed in the low ability group. While ability grouping may result in more positive self-concepts for high achievers, the simultaneous effect on lower group members may be a less positive self-concept. In fact, the group to which a student is assigned has an effect on achievement, regardless of previous performance. Not only can the self-concepts of students in low ability groups decline, so can their achievement. The findings regarding the impact of homogeneous ability grouping on affective development are unfavorable. Whatever the practice does to build or inflate the self-concepts of students in the high ability groups is counterbalanced by evidence of unfavorable effects of stigmatizing those placed in average and below average ability groups as inferior and incapable of learning.
Chapter Three

Summary and Conclusion

The practice of grouping by ability for instructional purposes is not supported by research. Even though a majority of teachers believe that ability grouping improves the effectiveness of schooling, the studies reviewed suggest that the practice has deleterious effects on teacher expectations and instructional practices (especially for lower ability grouped students), student perceptions of self and others, and academic performance of lower ability students. It interferes with opportunities for students to learn from, and learn to accept, peers of different abilities.

A review of the research literature indicates:

1. Both low- and high-achieving students perform better in classes with a preponderance of high-achieving students.

2. No research evidence exists to show that ability grouped class assignment improves school achievement.

3. Students' self-concepts and attitudes toward themselves and school are not enhanced in ability-grouped classrooms. Decreased self-concepts, decreased achievement motivation, and decreased academic performance are characteristics often found with low-ability students.

4. Educational aspirations are lowered for students placed in low-ability groups. Teachers generally work on drill, oral reading,
and give answers to the students in the "low" group. Meanwhile, the "high" group reads silently more and engages in discussions and reading for meaning.

5. Instructional practices correlating highly with school achievement are more likely to occur in high-ability than low-ability groups. Teachers generally teach students in a lower group at a lower level and expect less from them because of their group placement.

6. The classroom climate and teacher expectations of the high-ability group is more conducive to learning than that in low-ability groups.

7. The placement decisions concerning ability groups are made very early in a student's school life. These decisions may be based on questionable data, and they are often enduring. Once in a group, the student usually does not "escape".

8. High ability students often feel "elite". These students usually don't have empathy for the students who don't learn as quickly as them.

9. Exposure to undemanding curriculum and social stigma is often attached to students in low-ability groups. Sorensen and Hallinan (1986) concluded that there is an inequality in instruction as a result of ability grouping.

Assigning students to ability groups provides no clear benefits to
the majority of American students. Furthermore, the research strongly suggests that when a variety of instructional and classroom climate variables are considered, the quality of education in low-ability groups is significantly inferior to that in high-ability groups. Drawing from ability grouping research, the following recommendations are made: Whole class instruction should be used for initial presentation and practice of new concepts; and small heterogeneous learning groups should be used for practicing and reinforcing skills.

Ability grouping may have persisted because educators have known of no effective alternatives. Recent advances in educational research have provided new insight into effective instructional environments. Educators are encouraged to implement these alternative practices.

Alternatives

Educational researchers have recently directed their attention to identifying instructional and classroom variables that enhance the learning of students. Emerging from this research are specific instructional practices that are associated with greater educational attainment for all students. Evidence continues to mount that the strategies that work with the above-average learners are the ones most effective with the below-average learners. Listed below are some alternative educational methods to ability grouping.
Ability Grouping

1. **Modified Whole Group Instruction:** This approach is comprised of three main divisions. The first step involved the entire class for prereading activities. For the second step, known as the application step, the students divide into smaller heterogeneous groups and work on assigned tasks. The groups are then brought together again for postreading activities which form the third step of the lesson. Modified whole group instruction retains the basal reader as the center of instruction, yet diminishes greatly the time students spend directly with basal reader materials. With modified whole group instruction teachers will have time to build schema, to develop vocabulary, to help students apply strategies, to get involved in real discussions which provide opportunities to encourage real listening, and as a result, see students increasingly become involved with hands on materials - pencils, writing paper, and good literature.

Located in Appendix B is a model of the modified whole group instruction. This model shows how a teacher may organize the reading period while also providing an alternative to ability grouping (Wiedmann, 1989).

2. **Flexible Grouping:** In flexible grouping children are placed in temporary heterogeneous groups based on their level of independence as learners. Groups are not formed to deal with a given set of instructional materials, but instead are formed to engage in a variety of tasks. Principles that guide the use of flexible groups include
Ability Grouping

75

the following. There are no permanent groups. Groups are periodically created and modified to meet needs as they arise. At times there is only one group consisting of all the students. Groups vary in size from 2-3 or 9-10, depending on the task and purpose. Children should be able to evaluate the progress of the group and the teacher's assessment of the group's work. There should be a clear strategy for supervising the group's work. The task must be clear and appropriate to the needs and interest of the students, there must be variety, and there must be clearly understood follow-up activities. Groups also may be formed on the basis of interest, learning styles, or social needs (Harp, 1989).

3. Cooperative learning: refers to assigning students to small teams, usually with four or five members. Each team approximates the overall composition of the class by mixing high and low achievers, male and female students, etc. In cooperative learning, students encourage one another to do their best and help one another learn. Most educators use cooperative learning in the following manner. The lesson begins with a presentation by the teacher and students work in mixed ability groups to practice the material and master the lesson. The goal is to have each member of the group succeed at learning; each student's learning is individually assessed by the teacher; and the team received recognition (Harp, 1989).

Encourage cooperative learning by using different kinds of peer
work groups. Slavin (1987) suggests these cooperative learning options:

a. Completely Cooperative: Children have one goal or task to complete. Children work together sharing all aspects of the task. Everyone is expected to contribute.

b. Cooperative: Children have one goal or task but there is a division of labor. All members are expected to contribute, but not in the same way. The result or product is evaluated as a group.

c. Helping Obligatory: Each child works on the same task, but work is done together. They help each other, but product is individual, (i.e. seatwork).

d. Helping Permitted: Children work, are evaluated on their own product, but are allowed to help each other.

e. Peer Tutoring: One child acts as expert and helps other children.

4. Cooperative Reading Teams: A collaborative group in which students vary in ability and need. This approach is a combination of flexible grouping and cooperative learning. The team model is to meet the needs, particularly power needs (the ability to achieve academically and to gain importance) of students. The use of cooperative reading teams is another instructional tool which teachers can use to help students find success in school (Madden, 1988).
Personal Experience

Since the goal of education is to develop each child's potential and to give each child equal educational opportunity, I decided to eliminate reading groups in my classroom. I wanted to provide all my students with the opportunity to achieve academic success and to create an atmosphere that would enhance positive self-esteem. I decided to foster a multidimensional classroom where children of different abilities would work together for many different purposes. Instead of having three reading groups to prepare for, I now have one group I plan for. Teaching the whole group has given me the chance to plan one good lesson; to teach/model strategies more; to provide more guided practice and activities; and to supervise and assess all my students during guided practice time; this provides me more time to give private individual help as the rest of my students work. I have found that using a heterogeneous group has lessened the problem of labeling, low expectations, elitism, and poor self-esteem because students of lower ability are less obviously identified. I have found that children do work cooperatively together and they learn from one another. Since my students work as a team, competition is not fostered and students aren't afraid to ask anyone for help or guidance. The reading block time is enjoyed by all my students since each student is given the same educational opportunities to learn and to succeed.

We live in a heterogeneous society, one which professes to value
individual differences, and one which must value those differences in order to survive. Tolerance for individual differences is one of the most important values our schools can hope to teach. That task becomes more difficult when students are separated in the classroom to which they are placed. When we separate students by ability, not only do we disenfranchise the very children we should be working hard to integrate, but we also miss an opportunity to teach a lesson of lifelong significance, the value of diversity.
### Appendix A

#### Summary in Percentages of Responses to Survey on Ability Grouping

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>No Response/ Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you think that placing of pupils into homogeneous groups on the basis of test scores (mastery tests or standardized tests) is fairly accurate?</td>
<td>72</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>2. Do you feel from your experience that grouping children for instruction on the basis of abilities is instructionally effective?</td>
<td>92</td>
<td>8</td>
<td>--</td>
</tr>
<tr>
<td>3. Is there a better spirit of cooperation among students in homogeneous groups?</td>
<td>77</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>4. Do you find it easier to teach advanced students in homogeneous groups?</td>
<td>87</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>5. Do you find it easier to teach average students in homogeneous groups?</td>
<td>79</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>6. Do you find it easier to teach the low-achieving student in homogeneous groups?</td>
<td>77</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>7. Do students put forth more effort in homogeneous groups?</td>
<td>77</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>8. Was discipline easier with homogeneous groups?</td>
<td>72</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>9. Were students in the low group less discouraged in the homogeneous groups?</td>
<td>74</td>
<td>24</td>
<td>2</td>
</tr>
</tbody>
</table>
Ability Grouping
80

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No Response/Undecided</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Do you currently use ability grouping in your classroom?</td>
<td>74</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>11. Do you think that research on the effectiveness of ability grouping supports this strategy?</td>
<td>20</td>
<td>10</td>
<td>66* 4**</td>
</tr>
<tr>
<td>12. Which group benefits most?</td>
<td>Low Ave. High All</td>
<td>31</td>
<td>13</td>
</tr>
</tbody>
</table>

* Percent of teachers who stated they were not familiar with the research on ability grouping

** Percent of teachers who did not respond to this item

Wilson & Schmits (1978)
APPENDIX B

MODIFIED WHOLE GROUP INSTRUCTION

WHOLE GROUP

PREREADING ACTIVITIES

Small Group Individual Reading Basal Story
Small Group Guided Reading Basal Story
Small Group Writing Assignment
Small Group Library Reading
Small Group Special Instruction (L.S., Reading Specialist, LRT)

POSTREADING ACTIVITIES

WHOLE GROUP

L. Wiedmann (1989)

School District of Rhinelander
REFERENCES


Allington, R.L. (1980). Poor readers don't get to read much in reading groups. Language Arts, 57 (8), 872-876.


Ability Grouping


Ability Grouping


Weinstein, R.S. (1976). Reading group membership in first grade: teacher behaviors and pupil experience over time. *Journal of*
