

1-1-1993

Teacher perceptions of ability grouping practices in middle schools.

Robert C. Spear

University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_1

Recommended Citation

Spear, Robert C., "Teacher perceptions of ability grouping practices in middle schools." (1993). *Doctoral Dissertations 1896 - February 2014*. 5027.

https://scholarworks.umass.edu/dissertations_1/5027

This Open Access Dissertation is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Doctoral Dissertations 1896 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

UMASS/AMHERST



312066009196782

TEACHER PERCEPTIONS
OF
ABILITY GROUPING PRACTICES IN MIDDLE SCHOOLS

A Dissertation Presented

by

ROBERT C. SPEAR

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

May 1993

School of Education

© Copyright by Robert C. Spear 1993

All Rights Reserved


TEACHER PERCEPTIONS
OF
ABILITY GROUPING PRACTICES IN MIDDLE SCHOOLS


A Dissertation Presented

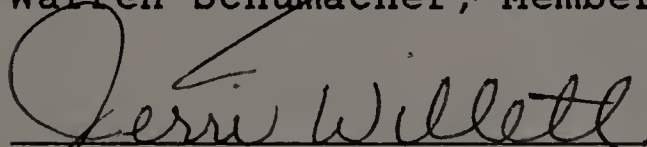
by

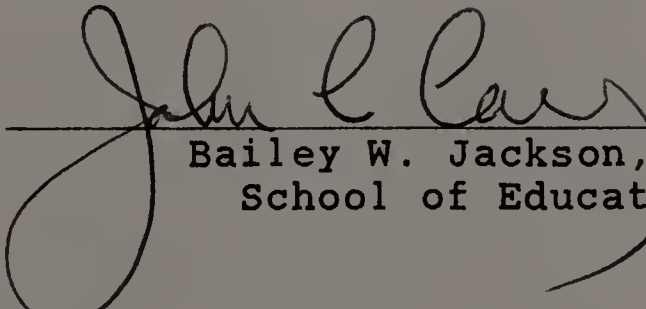
ROBERT C. SPEAR

Approved as to style and content by:


Robert L. Sinclair, Chair


Warren Schumacher, Member


Jerri Willett, Member


Bailey W. Jackson, Dean
School of Education

ACKNOWLEDGMENTS

I would like to thank the many people in my life who have supported me in my doctoral studies. I am appreciative of the members of the Southwick/Tolland Regional School District and, in particular, the Powder Mill Middle School family who encouraged, counseled, and understood me as I pursued my doctoral studies.

Special thanks are extended to my colleagues at the New England League of Middle Schools, whose many years of experience with and understanding of the young adolescent learner have dramatically enhanced my knowledge of the students we serve.

I am especially grateful to Professor Robert L. Sinclair chair of my dissertation committee, for his guidance and wisdom throughout my studies. His insight and wisdom challenged me to continually push limits of personal knowledge and understanding. His understanding of education and change, coupled with an amiable personal style, captured my interest in pursuing doctoral studies.

I also wish to thank the other members of my dissertation committee, Professors Jerri Willett and Warren Schumacher, for their advice and counsel in this process. Jerri's keen understanding of research methodologies was invaluable. Warren's knowledge and supportive demeanor, combined with his expertise of the early adolescent, were extremely helpful.

To the many people I have met at the University of Massachusetts, in courses and through professional experiences, I am indebted. Your ability to listen, challenge, support, question, and above all else, care was much appreciated.

Most importantly, I would like to thank my family, who stood by me in times of elation and despair. To Jamie, Abby, and Melanie, thanks for your understanding and support especially during the times when I might not have been there for you. And finally to my Pat Sue, thank you ever so much for your love and support. You recognized my desire to accept this personal learning challenge, and supported this effort in countless ways, day in and day out. For this, I am most appreciative.

ABSTRACT

TEACHER PERCEPTIONS
OF
ABILITY GROUPING PRACTICES IN MIDDLE SCHOOLS

MAY 1993

ROBERT C. SPEAR, B.S., CENTRAL CONNECTICUT STATE UNIVERSITY

M.A., CENTRAL CONNECTICUT STATE UNIVERSITY

Ed.D., UNIVERSITY OF MASSACHUSETTS

Directed by: Professor Robert L. Sinclair

The purpose of this study is to determine middle school teachers' thoughts on ability grouping. Specifically, this study identifies the reasons that teachers retain (R group) or eliminate (E group) ability grouping practices. Data from thirty-one teachers were categorized through the use of qualitative research methodology.

This study focuses on three research questions:

- (1) What do middle school teachers perceive to be the advantages of ability grouping?
- (2) What do middle school teachers perceive to be the disadvantages of ability grouping?
- (3) What alternative grouping practices do middle school teachers utilize to replace ability grouping?

Teachers who support ability grouping do not believe what they read and hear about ability grouping. For them, ability grouping may not be the best way to work with young adolescents in schools, but it works reasonably well and they do not believe another way of grouping is worth the

effort, or works any better. They may not want to change for a variety of other reasons. Their beliefs may limit thinking or they may not want to invest the time, energy, and thought necessary to alter ability grouping practices. These ideas, coupled with the notion that teaching ability grouped classes is easier and change is difficult, form the basis for their perceived advantages of ability grouping. R group teachers state as many disadvantages of ability grouping as they do advantages.

E group teachers are more adamant in their perceptions. They state fewer advantages of ability grouping, and many times more disadvantages. They believe that non-ability grouped methods, coupled with other teaching methodologies, are effective ways to teach middle school students.

Sixteen of seventeen teachers interested in eliminating ability grouping had taught in both ability grouped and non-ability grouped classrooms. The opposite was true for the teachers who wished to retain ability grouping. Only one of the fourteen R group teachers had taught both ability grouped and non-ability grouped classes. This suggests that to be supportive of eliminating ability grouping in classrooms, teachers must use both types of instruction.

Teachers who have chosen to eliminate ability grouping in their schools and classrooms have bridged the gap between acceptance of the status quo and taking action. Their actions are based upon a strong belief that they can be successful and benefit all students, both academically and socially.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	iv
ABSTRACT	vi
LIST OF TABLES	xi
LIST OF FIGURES	xii
 Chapter	
I. INTRODUCTION	
Statement of the Problem	1
Purpose of the Study	4
The Meaning of Terms	5
Significance of the Study	7
Delimitations of the Study	8
II. REVIEW OF THE LITERATURE 10	
History and Current Status of Ability Grouping	10
Assumptions About Ability Grouping	16
Research Regarding the Advantages and Disadvantages of Ability Grouping	19
Effects of Ability Grouping on the Young Adolescent	23
Social Development	24
Emotional Development	29
Intellectual Development	33
Teachers' Perceptions and Individual Change Foundations for Teacher Thought and Action	37
What is Perception?	43
Perceptual Differences	45
The Role of Perception and Individual Change	47
Individual Change in Educational Settings	51
Teacher Efficacy and Beliefs	53
Summary	57
III. DESIGN OF THE STUDY 59	
Sample Selection	61
Data Collection	66
Data Analysis	69
Summary	71

IV.	DATA ANALYSIS AND FINDINGS	72
	Findings by Setting	77
	Findings by Subject	77
	Definitions of Ability Grouping	78
	Beliefs and Values of Teachers	80
	Dilemmas and Questions	84
	Perceived Advantages of Ability Grouping	86
	Student Issues	86
	Parental Issues and the Public's Role in Education	94
	Curricula and Instructional Issues	97
	Teacher Issues	106
	Perceived Disadvantages of Ability Grouping	115
	Student Issues	116
	Parental Issues and the Public's Role	145
	Curriculum and Instructional Issues	148
	Teacher Issues	153
	Alternative Grouping Practices	173
	Students Working Together	173
	Flexibility in Grouping Practices	179
	Adjusting Curriculum and Materials	182
	Summary	195
V.	SUMMARY AND CONCLUSIONS	199
	Research Question One: What Do Middle School Teachers Perceive to be the Advantages of Ability Grouping?	202
	Summary of Findings for Research Question One.	207
	Research Question Two: What Do Middle School Teachers Perceive to be the Disadvantages of Ability Grouping?	208
	Summary of Findings for Research Question Two.	213
	Research Question Three: What Alternative Grouping Practices Do Middle School Teachers Utilize to Replace Ability Grouping?	214
	Summary of Findings	216
	Implications	218
	Recommendations	220
	Recommendations for Public Schools	221
	Recommendations for Higher Education	223
	Suggestions for Further Research	224
	Conclusion	226

APPENDICES 228

 A. LETTER TO PRINCIPALS 229

 B. LETTER TO TEACHERS 234

 C. SITE SELECTION SURVEY 238

 D. INTERVIEW INFORMATION AND PERMISSION 243

 E. INTERVIEW GUIDE 246

 F. LETTER TO COLLEAGUES (RELIABILITY) 251

BIBLIOGRAPHY 253

LIST OF TABLES

Table	Page
1. Ability Grouping Eliminate/Retain by Subject . .	64
2. Ability Grouping: Use/Don't Use: Retain/Eliminate	64
3. School: Setting, Per Pupil Cost, Teacher Distribution, Organizational Arrangements. .	67
4. Ability Grouping: Categories and Subcategories .	74
5. Ability Grouping: Eliminate/Retain Continuum . .	75

LIST OF FIGURES

Figures	Page
1. Boring's Young Woman/Old Woman	46

C H A P T E R I

INTRODUCTION

Statement of the Problem

Middle school students undergo a metamorphosis as they mature from children to adults. This transformation takes place at different times and rates for each individual, resulting in wide variations in young adolescents' social, emotional, intellectual, and physical development. These often extreme differences among students at the same grade level present a special challenge for middle school educators.

The needs of young adolescents demand unique instructional environments. Dorman, Lipsitz and Verner (1985) state that "there is a considerable lack of fit between what we know about early adolescents and what we do with them five days a week in schools" (p.46). The effective middle school uses methods and offers activities that meet the special needs of young adolescents.

Although ability grouping is a common practice in middle schools, it has come under close scrutiny over the past few years. Several researchers strongly suggest that ability grouping as traditionally practiced is detrimental to many learners (Bryson & Bentley, 1980; George, 1988; Good & Marshall, 1983; Goodlad, 1983; 1984; Low, 1988; Merina, 1989; Noland & Taylor, 1986; Oakes, 1985; Slavin, 1986; Trimble & Sinclair, 1987)

In What Research Says to the Middle Level Practitioner,

Johnston and Markle (1986) state:

The practice of grouping students 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 the practice has deleterious effects on teacher expectations and instructional practices (especially for lower ability group students), student perceptions of self and others, and academic performance of lower ability students. It interferes with opportunities for students to learn from - and to learn to accept - peers of different socio-economic backgrounds, and may perpetuate notions of superior and inferior classes of citizens. The practice is especially antithetical to the goals and practices of the middle school. (p.59)

Researchers have identified instructional practices that can meet the needs of young adolescents without grouping them by ability. Many teachers across the country have been successful in altering their ability grouping practices while maintaining high instructional standards. In a study funded by the National Education Association, Slavin, Braddock, Hall, and Petza (1989) found that "teachers and administrators with whom we spoke were almost uniformly positive about their move to reduce ability grouping, but they also note that in making the change there were many obstacles they had to overcome" (p.15). These obstacles included the challenge of making major changes in classroom management, instructional practice, and teacher perceptions.

Merina (1989) maintains that "the key to dismantling ability grouping is to explore alternative, appropriate ways of teaching the new groups. Switching the classes to heterogeneous groups and expecting the teacher to use

teaching methods meant for homogeneous classes makes the teacher's job virtually impossible" (p.11).

Moving toward a heterogeneous grouping of students requires teachers to make tremendous individual changes in the classroom. An example of a teacher's behavior change is moving from being the focal point in the class to facilitating learning by guiding students who are engaged in groups. In light of the time and effort needed to make these changes, teachers must be major participants in the decision to alter ability grouping practices.

Many middle school educators and curriculum planners have chosen to eliminate the use of ability grouping in classrooms; others have chosen not to. Why are some educators interested in changing ability grouping practices and others interested in maintaining the status quo? The reasoning of educators about the advantages and disadvantages of ability grouping is not always clear.

One can learn much from the insights of teachers. By listening to what they have to say, teachers' reasons for supporting or not supporting ability grouping may become clear. Understanding why teachers continue to use a particular ability grouping practice may help us to understand the decisions they make about ability grouping a particular group of students.

In all middle schools, students are grouped in some manner. The crucial issue is not whether we group students but how we group students. The problem is how to encourage more teachers to eliminate ability grouping practices. In

order for middle school teachers to move away from ability grouping, they must first change the way they think about it. The first step toward changing teachers' thinking about ability grouping is to understand how and why they think the way they do. If teachers' thoughts are unknown, it would be difficult, if not impossible, to eliminate ability grouping practices in middle schools.

Purpose of the Study

The purpose of this study is to determine middle school teachers' thoughts on ability grouping. Specifically, this study identifies the reasons that teachers retain or eliminate ability grouping practices in their classrooms. This study also identifies educators who have eliminated ability grouping and describes the grouping practices they have implemented to meet the unique learning needs of young adolescents.

This study focuses on three research questions:

- (1) What do middle school teachers perceive to be the advantages of ability grouping?
- (2) What do middle school teachers perceive to be the disadvantages of ability grouping?
- (3) What alternative grouping practices do middle school teachers utilize to replace ability grouping?

Educators must understand teachers' perceptions of ability grouping if they are to change those perceptions.

Documenting teacher perceptions is the first step in this process. Creating conditions that might alter teachers' thinking and help them to see plausible alternatives to ability grouping is the next step.

The Meaning of Terms

A review of professional literature indicates that terms related to ability grouping have different and sometimes confusing meanings. Developing common meanings for these terms will facilitate communication and understanding. George (1988) defines tracking as "dividing students into class-sized groups based on a measure of a student's ability or prior achievement, and then attempting to design and deliver differentiated learning experiences to each group" (p. 1). Oakes (1985) contends that tracking "is in essence sorting." (p. 3) Bryson and Bentley (1980) state that "tracking is the practice of assigning students ... to a specific curriculum" (p. 9).

French and Rothman (1990) suggest that "ability grouping refers to the separation of children in schools on the basis of perceived ability, as determined by standardized test scores, student academic performance, less formal teacher assignment, and/or parental and student input" (p. 1). Bryson & Bentley (1980) state that "ability grouping is the practice of prejudging students' ability based on some type of intelligence test and past educational performance and then assigning two or more students to a

particular instructional setting for a sustained period of time" (p. 8). Slavin (1987) states that "ability grouping consistently implies some means of grouping students for instruction by ability or achievement so as to create instructional groups that are as homogeneous as possible." (p. 294)

The following definitions of essential words give meaning to this study:

Grouping refers to the many ways educators may want to organize for instruction.

Grouping encompasses other terms such as tracking, ability grouping, cooperative grouping, heterogeneous grouping, and homogeneous grouping. It also encompasses the practice of organizing classes by age, gender, interest, learning style, and a variety of other criteria including length of time and class size. In schools of more than twenty-five students, some kind of grouping is a must. It is impossible to organize for effective instruction without some form of grouping. Therefore, grouping is not inherently good or bad. Value judgments center on the variables associated with grouping students in specific ways.

Ability grouping refers to a clustering of students who have some common perceived ability.

Ability grouped students remain together for a specific length of time. Children are grouped on the basis of perceived ability as determined by standardized test scores, student academic performance, informal teacher assignment, and/or parental and student input. For example, students

might be grouped by ability for reading instruction based on the results of a reading achievement test.

Tracking is a form of ability grouping and is a method whereby students are grouped together and stay together for an extended time: a semester, a year, or a school career.

Tracking is more permanent than other forms of grouping and usually crosses over traditional subject disciplines. Tracking is a practice that assigns students to a specific curriculum. Common examples are the "college track", the "A or B track", or the "top, middle, or low tracks".

Middle schools have programs and activities to meet the particular needs of young adolescents. Consideration is given to the social, emotional, intellectual, and physical needs of the students served.

Effective middle schools include key programmatic components. Alexander and George (1981) identify these necessary components as: (1) interdisciplinary teaming, (2) advisor/advisee programs, (3) transition/articulation programs with elementary and high schools, (4) exploratory programs, and (5) the development of appropriate learning environments for young adolescents.

Significance of the Study

This study has both practical and conceptual significance. Research strongly supports educators who wish

to eliminate ability grouping practices in middle schools. It is evident that the practice of ability grouping is not compatible with the healthy development of young adolescents (Spear, 1992). The professional literature suggests effective ways that middle school educators can eliminate ability grouping practices. However, little research exists to help educators understand why teachers choose to use or not use ability grouping.

This study will help those who are involved in teacher preparation programs, as well as those planning pre-service and in-service learning opportunities. The data will help educators to understand the problems and perceptions of middle school teachers as they attempt to eliminate grouping practices.

Delimitations of the Study

The findings, as defined and investigated in this study, are considered exploratory in nature. Analysis of data suggests avenues for further research. This study is delimited to the schooling of young adolescents in grade seven in middle schools in the western Massachusetts, northern Connecticut region. By limiting data to grade seven students in middle schools, this study may produce findings different from those reported in other studies at other levels, and in different kinds of schools.

The study's population consists of teachers who work in middle schools that contain grade seven. The number of

teachers (thirty-one) limits generalizability. Because it is the teachers who must change grouping arrangements, other populations were excluded from this study.

This study reports teachers' perceptions of the advantages and disadvantages of ability grouping. However, no attempt has been made to determine the accuracy of these perceptions. A study of this magnitude has many variables. The process of eliminating ability grouping practices is complex: no one way will work for all educators, and what may work for one educator may be disastrous for another. Educators must interpret results of this study in terms of the individual teachers and the varied classroom environments in which they work.

Three assumptions guide this study:

1. Elimination of ability grouping practices requires a change in teacher behavior in the classroom.
2. The process of eliminating ability grouping is complex, personal, and often difficult.
3. While the process of eliminating ability grouping practices is personal and individualized, it cannot be accomplished in isolation. Altering rigid ability grouping practices requires that educators be part of a group effort (a team, a grade level, or a school).

C H A P T E R I I

REVIEW OF THE LITERATURE

The literature review consists of three parts. First, literature that describes the history and current status of ability grouping in secondary schools (including middle and junior high schools) is reviewed. Second, research findings about the advantages and disadvantages of ability grouping are reviewed. This literature provides information about the perceived benefits and realities of ability grouping and its effect upon young adolescent development and learning. Third, research about teacher perceptions and personal change is reviewed. This literature focuses on the relationship between a person's perceptions and his/her actions.

The review of literature establishes the current research base. This study expands this base and provides direction for further research.

History and Current Status of Ability Grouping

The history of tracking and ability grouping began with American public schools in Massachusetts. Through legislation, the state created common schools in 1852. These schools were designed "...to provide universal education that would increase opportunity, teach morality and citizenship, encourage leadership, maintain social mobility, and promote responsiveness to social progress. In short, to

develop an intelligent mass citizenry" (Oakes, 1985, p. 16). Towards the end of the 1800s, compulsory school attendance became law in many states, but this law was not widely enforced. Schools were designed for white, Protestant, middle and upper middle-class males. Until the early 1900s, when immigration to America was at its peak, only a small percentage of the population attended school, and those few tended to have similar backgrounds.

In the early part of the 1900s, many immigrants came to America; by mid-1920, they numbered over 50 million. School enrollments increased dramatically during this time. White, Anglo-Saxon, middle-class youngsters lost their numerical dominance, particularly in urban schools. During this time, many public schools were under pressure to provide a greater variety of instruction. The presence of diverse cultural groups meant that schools had to meet a variety of needs.

Many immigrants saw education as the key to improving their lives and becoming a part of their new country. At the same time, colleges were demanding new standards and core curricula to standardize admissions. These phenomena gave birth to the comprehensive high school--a new type of secondary school that promised an education for everyone. Vocational, general, and college tracks were created to address the diverse needs of the population. The comprehensive high school did not, of course, promise the same education for everyone; often, students were tracked according to language ability or racial background.

In addition to the development of the comprehensive high school, other events played an important role in school tracking and ability grouping. One was the Industrial Revolution. At the turn of the century, Americans had become enamored with industrial efficiency. Business leaders became school board members and were actively involved in educational decision-making. The application of industrial principles to educational institutions was the next logical step. "It was seductive, as schools became large, to think of them as factories that could use efficient and scientific methods to turn the raw material, children, into finished products, educated adults" (Oakes, 1985, p. 29).

Businesses needed workers, supervisors, and managers, each of whom required different levels of education. Because more workers were needed than managers, schools (through tracking) singled out those who seemed to have leadership potential, and encouraged them to complete high school and continue on to college. Educators discouraged others (the workers) from completing high school or furthering their education.

Another influential factor was the development of the Intelligence Quotient (IQ) test in the early 1900s. IQ tests lent an air of objectivity to the placement procedures used to separate children for instruction. IQ testing was thought to be an accurate predictor of academic success. If students had high IQ test scores, they would then be allowed to pursue college. If students had low IQ test scores, they would receive job training or, in the worst cases, be

allowed to drop out of school. One of the test pioneers, Louis Terman (1923) commented that "this information would be of great value in planning the education of a particular child, and also in planning the differentiated curriculum recommended" (p. 27). These practices, begun in the first quarter of this century, continue today in many American schools.

The junior high school, created in the 1920s, was inspired partly by the desire to determine suitable curriculum placements (vocational or academic) for students by the time they reached the age of twelve. The remnants of this philosophy of the 1920's remain with us today in both junior high and middle schools. Upper ability, "college" preparation classes, and "shop" classes are still offered in many of these schools today.

The World Wars contributed to the continuation of tracking and the separation of boys and girls. The military needed soldiers and capable officers. Aptitude and revised intelligence testing offered a seemingly foolproof way to separate people. These testing practices were adopted by many schools, and gave educators what appeared to be an accurate measure of a student's intelligence and other capabilities. This encouraged the continued separation of students by gender, vocation, and leadership potential, utilizing what was thought to be more "accurate" data.

As the "Baby Boomer" generation came of school age, schools and school programs were forced to expand to handle the influx of new students. Generally, large high schools

had four tracks: general, college, business, and vocational. Junior high schools prepared students for whichever track the students were perceived as being best suited. Different level courses were developed at the junior high school level to accommodate this change.

Increased media coverage of world events in the late 1960s and 1970s affected grouping practices. Exposure to other world cultures and to other areas of the country broadened citizens' perspectives and enabled individuals to expand their thinking and their view of the world. This expanded perspective encouraged people to think about serious social problems, including racial segregation, the plight of the poor and homeless, the huge gap between rich and poor, and the abuse and manipulation of power. The role of ability grouping in perpetuating these problems, specifically by limiting opportunities for all students and separating them by race and income, began to be closely examined.

Recently, the development of a global economy, the influence of technology, and the corresponding reduction in industrial jobs have brought about a renewed focus on education. After years of plentiful unskilled, industrial jobs, the current era is characterized by rapid displacement of workers and a strong demand for high academic skills (Drucker, 1981; Etzioni, 1982; Leontief, 1982). Because of the high dropout rates and the lack of success of many students in the world of work, tracking and ability grouping practices have been closely examined during this period. A

new emphasis has been placed on the need for effective education for all.

Families of diverse cultural backgrounds now have access to the American education system. Accommodating this diversity of students presents great challenges, and demands a serious look at the issues raised by ability grouping.

In June of 1989, the Carnegie Council on Adolescent Development released a report, entitled Turning Points: Preparing American Youth for the Twenty First Century, which addressed the issue of ensuring success for all students. The philosophy of the task force was that "all young adolescents should have the opportunity to succeed in every aspect of the middle school program, regardless of previous achievement or the pace at which they learn" (p. 49). The authors of this report state:

Grouping students by classes according to achievement level is almost universal in middle grade schools. In theory, between class tracking reduces the heterogeneity of the classes and enables teachers to adjust instruction to students' knowledge and skills. Greater achievement is then possible for both low and high ability students. In practice this kind of tracking is proven to be one of the most divisive and damaging school practices in existence. Time and again, young people placed in lower academic tracks and classes, often during the middle grades, are locked into dull, repetitive instructional programs leading at best to minimum competencies. The psychic numbing these youth experience from a "dummied-down" curriculum contrasts sharply with the exciting opportunities for learning and critical thinking that students in higher tracks or classes may experience. (pp. 49-50)

In many cases, students placed in a lower track remain in that track for the rest of their school careers. The task force found that a disproportionate number of minority youth

are placed in lower academic groups; likewise, higher socioeconomic level students, more often than not, appear in the upper ability tracks. In this regard, Turning Points puts forth a challenge: "To focus once again on the goal that tracking sought to achieve in the first place--effectively teaching students of diverse ability and differing rates of learning" (p. 50).

Assumptions About Ability Grouping

Those who endorse ability grouping defend it by citing the following assumptions: (1) students learn more or better in homogeneous groups; (2) students, especially the slower ones, feel more positively about themselves and school when they are in homogeneous groups; (3) student placements are suitable, accurate, and fair, and involve some fundamental considerations; and (4) teaching is easier (with respect to meeting both individual needs and managing classroom instruction in general) when students are in homogeneous groups (Oakes, 1985, pp. 7-13).

According to Oakes (1985), educators have "deep seated beliefs and long held assumptions about the appropriateness of what happens in schools. These beliefs are so ingrained in our thinking and behavior, so much a part of our school culture, that we rarely submit them to careful scrutiny" (p. 5). Oakes responds to the four assumptions regarding tracking and ability grouping.

The first assumption, that students learn more, is "simply not true, or at least we have virtually mountains of research evidence indicating that homogeneous grouping does not consistently help anyone learn better" (p. 7). The second assumption, that slower students feel more positively about themselves, is refuted by research, which indicates that "students placed in average and slow tracks, do not develop positive attitudes.... The tracking process seems to foster lowered self-esteem among teenagers...students in upper tracks, on the other hand, sometimes develop inflated self-concepts as a result of their track placements" (p. 8).

The third assumption holds that placements are appropriate, since the use of standardized tests are often coupled with guidance counselor recommendations, grades, and parental input into the selection process for grouping. All of these claims, however, are suspect. Standardized tests are designed to separate students at a very specific, concrete level and to find the differences between students. They do not test what students know, but rather what they do not know; therefore, obscure questions are developed to identify these differences. Test makers do not use questions that everyone will get right.

Teacher and counselor recommendations are suspect in that they are often influenced not by a student's ability, but by a student's appearance, manner, responsibility, or level of maturity. Parental choice also raises certain questions. Few parents would admit that their children are appropriately placed in classrooms of lower ability. All

parents want the best for their children and see the uniqueness and special qualities of their children. They do not often see their children in relation to other children; therefore, their "objective" assessment of the student's achievement and capabilities is suspect at best.

The fourth assumption, that teaching homogeneous groups of students is easier, may be harder to address. However, it can be stated that there are other ways of organizing classrooms and ways of teaching students that are both effective and functional. There are "instructional strategies that make heterogeneity in a classroom a positive instructional resource. Further...even if tracking students so teachers can work with homogeneous groups is easier, it is not worth the educational and social price we pay for it" (Oakes, 1985, p. 14).

The debate regarding ability grouping continues in 1993. The practice of retaining ability grouping is largely supported by those who believe in this organizational arrangement, and by the many advocates of gifted and talented students. In urban schools ability grouping is widely used, but it is coming under close scrutiny because of the racial issues associated with the practice. For example, many more African-American students are placed in lower ability groups, and far fewer are placed in upper ability groups.

Tracking and its various modifications have been accepted features of this country's schools for nearly a century. However, numerous educators agree with Wheelock

(1992), who states that "nowadays, tradition, convenience, and lack of compelling alternatives are no longer adequate reasons to maintain tracking and ability grouping. In the 1990s, we know that tracking is both harmful and unnecessary. New grouping, curriculum, and instructional practices that are more compatible with the democratic philosophy of American society must feature in any agenda for meaningful school reform" (p. 9).

Research Regarding Advantages and Disadvantages
of Ability Grouping

Many educational practices are difficult to investigate. However, "ability grouping and tracking are more amenable to scientific study than are many [practices in] schools. The research findings raise some serious questions about the benefits claimed for tracking and suggest some negative side effects" (Goodlad, 1984 p. 151).

Wilson and Schmits (1978), in a review of research on ability grouping, found that teachers generally believe that grouping students by ability is done fairly, is instructionally effective, makes teaching students at all ability levels easier, results in fewer discipline problems, and generates a better spirit of cooperation among students.

The underlying assumptions of ability grouping are that teachers can create groups of children that are alike and that instruction with such homogeneous groups will be more efficient and effective. The literature of educational

research has challenged these assumptions. Recent research has brought into focus the inequities that result from tracking: minorities and children from low-income families are overrepresented in low achievement groups (Braddock, 1990; Esposito, 1973). Students on low tracks often face low teacher expectations and a lack of adequate peer models; low tracks often offer simplistic instruction.

Low, middle, and high groups encounter different instructional conditions. Students in low level classes receive less instructional time (Hilliard, 1989; Oakes, 1985). They also experience a watered-down curriculum (Anyon, 1981; Becker, 1990; Gamoran & Berends, 1987; Goodlad, 1984; Metz, 1978), and engage in interactions with their teachers that are more negative and less conducive to learning (Cazden & Mehan, 1989; Collins, 1986; Leder, 1987; Sells, 1981), when contrasted to their high ability peers. Not surprisingly, these findings suggest that instructional grouping widens the achievement gap between more and less advanced students over time (Goodlad, 1984). "An economic stratification develop[ed] within classes, the wealthier students dominate[d] the gifted and talented classes" (Rist, 1970), while the "poorer ones often occupied the remedial classes, that reinforced a class difference the kids already felt" (Merina, 1989, p. 10).

Allan (1991) contends that claims for the academic superiority of mixed-ability grouping or for whole-group instructional practices are not substantiated for academically gifted and talented learners. Allan found

higher achievement for gifted and talented students when they are ability grouped. However, some researchers, such as Slavin, do not agree and numerous other researchers point to another significant finding: there is no pervasive evidence that students benefit from tracking.

A meta-analysis of twenty-six studies found the effects of grouping on achievement to be essentially zero for high, average, and low achievers (Slavin, 1991). Slavin (1986) concluded that "if forming classes on this basis of student ability actually helped students to learn, we would by now have evidence supporting the practice". Slavin's comment is further supported by a review conducted by the Harvard Education Letter (1987) which concluded: "All this research taken together makes a reasonably strong case for reducing tracking and for supporting teachers who want to work with mixed groups" (p. 2).

With regard to student selection, Low (1988) stated that, "Practitioners revealed differences in their beliefs about the goals of ability grouping formation. Respondents employed sharply different placement strategies." She continues, "Practitioners held different views of the selected student characteristics [with the result that]...students with the same characteristics were recommended for different classes" (p. 23). Her study indicates that teacher perceptions of students' abilities often have a low degree of reliability.

One of the more remarkable research findings is that there is relatively little mobility within the assigned

ability groups. Danials (1961) reported overwhelming stability in group placement. He found that only two percent of the students in this study moved, while teachers perceived that seventeen percent of the students changed tracks.

In a 1987 study, Trimble and Sinclair state:

Striking similarities in content and instruction across ability grouping, seriously challenged the rationale for sorting students. Instead of widely varied educational practices, offered to help each student learn in the most appropriate way, we found a number of similarities of practices of content both within and across classes ...There is little evidence to suggest any group of students consistently benefits from ability grouping. ...The findings in this study add to the mounting evidence that calls for a change in the present grouping practices in American schools. Only when schools stop sorting youth for learning by placing them into ability groups will it be possible to provide more equitable access to quality education for all students. (p. 20)

In a review of research, entitled The Effects of Ability Grouping: A Meta-Analysis of Research Findings, Noland and Taylor (1986) found that "the empirical evidence indicates that ability grouping does not improve overall student achievement and does damage overall to student self concept" (p. 30). They concluded, "We ought to be seeking policies and programs which enhance educational outcomes and which promote fairness in educational processes. Ability grouping does neither" (p. 30).

Good and Marshall (1983), in a research review chapter entitled, "Do Students Learn More In Heterogeneous or Homogeneous Groups?", conclude that even allowing for some less than ideal studies, the research in this area indicates

that "tracking and ability grouping have few desirable consequences for low ability students. Research indicates that in many classrooms teachers err by holding expectations that are too low, by pacing instruction too slowly, and by ignoring or underemphasizing the substantive expectation of task when instructing low groups" (p. 2).

These studies suggest that ability grouping is not successful in addressing the diverse needs of students. "Certainly students bring differences with them to school but by tracking schools [help] to widen, rather than narrow, these differences....Everywhere we turn we find that the differentiated structure of schools throws up barriers to achievement for poor and minority students" (Oakes, 1986, p. 17).

Oakes (1986) concludes that: "Tracking, because it is usually taken to be a neutral practice and a part of the mechanics of schooling, has escaped the attention of those that mean well; but by failing to scrutinize the effects of tracking, schools unwittingly subvert their well meant efforts to promote academic excellence and provide conditions that will enable all students to achieve it" (p. 17).

Effects of Ability Grouping on the Young Adolescent

This section explores the influences of ability grouping on the developmental characteristics of young adolescents. First, social development issues are explored:

peer influence, interactions with the opposite sex, the need for independence, and the desire for "sophistication".

Next, the emotional development of the young adolescent is discussed: the search for identity, the changing "inner world" of the adolescent, the development of self concept, and the resulting self-centeredness. The section closes with an examination of the intellectual development of the students: abstract reasoning, variations in the pace of intellectual development among adolescents, influences on achievement, and the importance of imagination.

Inappropriate grouping can have a profound influence on the social, emotional, and intellectual development of young adolescents. It creates a rigid educational environment that is contrary to the needs of students (Eccles, Midgley, Feldlaufer, Reuman, Wigfield, & MacIver, 1988).

"The education of young adolescents must, of course, be an integrated venture; physical, social, emotional, and intellectual development are intertwined and interactive. To rank one dimension above the others, to try to separate them out, is to misunderstand the nature of the ten-to-fourteen year old" (Lounsbury, 1991, p. 3). Modeling and environment are crucial to the development of early adolescence in each of the three areas identified. How schools organize for instruction determines whom students will interact with.

Social Development

Young adolescents are influenced by peers, boy-girl relationships, dependence-independence issues, and the

search for sophistication. "The web of social contracts and interactions experienced by middle level students is intricate, involves an extensive amount of time to sustain, and has a potent impact on the way young people think, feel, and act" (Van Hoose & Strahan, 1988, p. 27). Peer influence is universally accepted as an issue in the social development of young adolescents. Peer interaction is the bridge that moves individuals from parental control to self control. "Acceptance by friends and others who are the same age is a central concern in the lives of young adolescents. In the extreme, a young person may be willing to commit acts of violence, take drugs, become sexually precocious, or become dependent on alcohol to be accepted by peers" (Van Hoose & Strahan, 1988, p. 29).

If peer influence is a powerful motivator in the lives of young adolescents, then the relationships between grouping and peer influence must be closely examined. Hallinan and Sorensen (1985) contend that tracking leads to social stratification. Students in low ability groups tend to have behavioral problems and low self-esteem (Eder, 1982). If high-ability students are grouped together, experience suggests that elitism can occur. Wilkinson, Cherry, and Calculator (1982) found some peer-related benefits for students placed in higher ability groups. Schwartz (1981) observed that cliques seem to form within tracked classes; students of low ability are less likely to create and maintain social networks with their more able peers.

Opposite Sex Interactions. Frequently, boys dominate lower ability group classrooms, while higher ability group classrooms tend to have more girls. The implication of this situation is that gender interaction is reduced primarily to social settings, depriving both genders of intellectual interaction and appreciation.

The presence of fewer girls in the low ability track and fewer boys in the high ability track can cause serious social pressures. A popular boy in the upper-level group may encounter extreme social pressures exerted by early maturing girls who are competing for his attention. Another problem is the "tough girl", whose development is influenced negatively by the behavior of many boys in the low ability group.

Mixed groups and flexibility can facilitate a natural relationship between boys and girls. While there are clear differences between boys and girls, flexible grouping practices can reinforce positive characteristics and behaviors through appropriate modeling for both sexes. This can help reduce the negative impact of gender bias and sex stereotyping.

Independent Learning. Another issue relevant to ability grouping is the social development of young adolescents and the tension between dependence and independence. "Because young adolescents are in a transitional stage, between childhood and late adolescence they vacillate in their behaviors from being childlike to being more like adults....They shift in a heartbeat from independence to

dependence" (Van Hoose & Strahan, 1988, p. 30). Research reveals that in low-ability classrooms more attention is paid to organizational issues, and to rote and systematic learning, and that in high ability groups there are greater opportunities for creative thought and independent learning (Eder, 1982; Martin & Evertson, 1980; Stern & Shavelson, 1981). This results in restrictive classrooms for both low and high ability groups--classrooms that may not be flexible enough to meet the changing characteristics of young adolescents.

Students of all ability levels need an opportunity for both kinds of learning. High ability students may still benefit from the organized, structured learning environments characteristic of low-ability groups. Likewise, low ability students need an opportunity for independent, self-directed, creative learning. Again the practice of ability grouping seems to conflict with knowledge about how young adolescents learn.

Since one ability group stays together for the entire day or for the entire core curricula, instruction for ability grouping is designed for only one level of cognitive development. Students, however, require a variety of approaches to learning. "Middle grade teachers need to be aware of the wide range of individual differences in reasoning development that are likely to occur in a given class...planning instruction is like shooting at a moving target, due to the rapid individual changes" (Van Hoose & Strahan, 1988, p. 16). The vastness of individual

differences makes it nearly impossible to group according to each individual student's stage of development.

Sophistication. Young adolescents strive to demonstrate that they are mature. Two common behavior patterns illustrate this notion: (1) the attempts by middle level students to use sophisticated language, and (2) their capacity to be very righteous and to defend a position. Students will use their newfound abilities to experiment and use words to appear more sophisticated; frequently, they will misuse these words. If learning environments are not caring and sensitive to this experimentation, students will not venture out, experience, and try new vocabulary words or word meanings.

In low ability groups, learning is structured and there is often little opportunity for experimentation with language and learning (Brophy & Good, 1974); in high ability groups, the mood is often competitive when sophisticated idea development occurs (Eder, 1982). As a result, students of low and high groups often hesitate to share their thought processes with the group. It is critical that students at all levels have an opportunity to discuss ideas, defend positions, and form opinions in a supportive atmosphere. Ralph Tyler, a respected scholar and educational leader and researcher, states: "The learning does not come from the experience of an activity, it comes from the reflection upon that experience" (personal conversation, 1989). We must provide classroom environments that will enable students to

reflect on their experiences without the threat of punishment, ridicule, or sarcasm.

Emotional Development

Young adolescent development is often characterized by tremendous mood swings, shifts from immaturity to maturity, and switching from narrow personal issues to world problems. At this time of life, interpersonal skills are developed, values, and concepts of self are formed. Important issues of identity and self control also emerge in the person.

Identity and Self Control. Much of what middle level educators attempt to provide young adolescents relates to their search for identity. Middle level students need to achieve in order to develop a positive self-concept. Indeed, self-image develops from successes and failures in the academic as well as the social arena (Levenson, 1979). If it is true that success breeds success, then there are serious implications for ability grouping. Eash (1966) expresses concern about the influence of ability grouping on self-concept. He warns that ability grouping might have negative effects on self-perceptions, dignity, self-worth, and attitude toward other children. Students in low ability groups know that they are in a low ability group. They may develop a poor self-concept and a feeling that they cannot succeed. High group students, on the other hand, may develop an inflated and inaccurate self-image (Alexander & McDill, 1976; Brophy & Good, 1974; Esposito, 1973; Kelly, 1974; Shafer & Olexakim, 1971).

Middle students may perceive themselves as only average, never "good" at anything. A more effective approach to build self-concept is to create instructional environments that encourage experimentation, where failures are viewed as a necessary part of learning and a foundation upon which future success may be built.

During the adolescent period, students also "try out" different identities: they change their physical appearance, wear hats to school, and try new social roles. At times, they may assume this new identity in total. The implication here for grouping practices is that if students are exposed to just a limited group of people, their range of experimentation will be narrow, possibly resulting in a warped sense of personal identity. The variety and diversity within adolescent students should be celebrated as an enhancement of the learning environment, and as a support to personal growth.

Certainly, early adolescence is a time of change and fluctuation; there is often an imbalance between satisfied and unsatisfied needs. "Self concept first emerges as a global construct, that is, students see themselves as able or unable, responsible or irresponsible, valuable or worthless" (Van Hoose & Strahan, 1988, p. 20). If self-concept begins as a global construct, then the effects of ability grouping are extremely important. Simply stated, young adolescents placed in ability groups may develop an unrealistic sense of who they are. Low ability group students will more likely see themselves as unable,

irresponsible, and worthless. Higher ability grouped students may view themselves as over-able, over-responsible and over-valuable (Mozdoerz, McDonville, & Krauss, 1968). In addition, students in both high and low ability groups may have their perceptions skewed by competition within those groups. This is especially apparent in the high groups, where adolescents with admirable traits may view themselves in the mid to low range within their instructional group and begin to see themselves as less than adequate, or unable, even though they may be very capable.

"The Poker Chip Theory", an analogy originated by Canfield and Wells (1976), suggests that students come to situations with their self-concepts conceptualized as a stack of poker chips. If their self-concept is positive they have many poker chips; if it is not, they have fewer poker chips. When it comes to gambling on a new experience, those who have many chips will be more likely to take risks; those with fewer chips must conserve "resources" and thus are less likely to gamble. Therefore, students with high self-concepts are more willing to risk in a learning situation. Implications for ability grouping are obvious. If students are not willing to gamble/risk, they will not have the opportunity to "win" more chips. This situation sets up a spiral effect, with the direction going lower and lower or higher and higher.

Ability grouping may contribute to this spiraling effect. In a more heterogeneous arrangement, this effect is not structured into the school organization. "As early

adolescents come to believe they are inadequate, they develop patterns of behavior to attend to the perceived inadequacy" (Van Hoose & Strahan, 1988, p. 21). Some students will take on false roles and behaviors in order to compensate for what they perceive to be their own inadequacy. This experimentation is extremely important in an adolescent's development. Many students eventually let go of this behavioral experimentation during adolescence, and embrace a view of themselves as competent persons. Unfortunately, some students do not work through this sense of inadequacy and carry it with them for the rest of their lives.

Young adolescents attempt to move from parental control, through peer domination, to self-control. As students are making this transition, diverse role models and peer group interactions influence the process. Since self-control is learned by trial and error and peer influence is highly important in this process, it seems logical that exposure to a diverse cross section of other students can enhance student experiences.

Studies have found that students in low groups exhibit less self-control and that students in high groups exhibit more self-control (Dentzer & Wheelock, 1990). Thus, students in high and average ability groups have greater opportunities to model proper behavior. Students benefit from understanding how others process information and how others view themselves.

Intellectual Development

During early adolescence, students begin to develop the ability to reason abstractly. They begin to think of the world around them, and themselves, in new ways. For the first time, young adolescents can "think about thinking". They begin to develop abstract reasoning and reflective thinking, which is especially important for successful learning. Students moving from concrete to formal stages in their development are often confused about their thought processes. This is further complicated by the fact that these abilities develop much later in some students and much earlier in others.

All students do not move together in a moment that correlates with other aspects of adolescent development. Piaget (1977) reports experimental studies showing as much as four years of "lag time" in the transition from concrete to formal operations (p. 36). Intellectual development is also uneven across subject areas; capacity to think on a formal level may take place in one particular subject area, but may not in another (Smart & Smart, 1973). Strategies for helping students move from concrete to formal operations should be a concern for all teachers. Flexible, changing grouping patterns may facilitate intellectual growth through modeling and stimulation.

Achievement. There is some disagreement among researchers regarding ability grouping and achievement. Wilson and Schmits (1978) contend that research does not support the notion that ability grouping improves student

achievement. Millman and Johnson (1964) studied 8,000 seventh and eighth graders. They concluded that academic improvement did not directly relate to ability grouping, or any other single component of an educational program.

However, other research suggests that under certain circumstances students in high ability classes benefit from ability grouped classes (Allan, 1991; Kulik, 1991).

"Grouping programs that entail more substantial adjustment of curriculum to ability have clear positive effects on [high ability] children. Cross grade and within class programs, for example, provide both grouping and curricular adjustment in reading and arithmetic for elementary school pupils" (Kulik, 1992, p. vii).

However, Oakes (1988) contends that "Students who are placed in high-ability groups have access to far richer schooling experience than other students. This finding helps explain, at least in part, why it is that tracking sometimes seems to work for high ability students and not for others. It also provides clues about what needs to be changed. Students in high ability groups may have the instructional advantages of being in a challenging academic environment. It is ironic that when other, less able students are offered similar advantages, they also seem to benefit" (pp. 42-43).

Students placed in the top academic groups often feel pressured to move ahead at a faster pace and to meet increasingly demanding standards (Starkey & Klusendorf, 1977). Teachers often push concepts, chapters, new terms, etc., past students at a breakneck pace in order to "cover

the curriculum." Top-tracked students also come under additional pressure to take more advanced courses to prepare for high school and college or to gain an edge in preparing for an increasingly competitive world.

While some of these goals are worthwhile, frequently they become negative experiences for young adolescents. Those with interest and skill in a specific area should be allowed to pursue that area of interest. For those students, the curriculum provides an opportunity to learn enriched content. But in general, thrusting whole groups of young adolescents into an accelerated curriculum should be avoided in light of the developmental needs of young adolescents.

In a study of ability grouping, Heathers (1967) maintains that teachers used different methods and stressed different skills in different ability groups. For low ability groups, teachers emphasized basic skills, drill and practice. For high ability groups, conceptual learning was stressed. These findings are supported by Squires (1966), who found that slow learning groups experienced dull, unimaginative teaching methods.

As young adolescents move from the concrete to the formal level of reasoning, they begin to think about how they are thinking. When presented with mental tasks that are difficult, they often dwell on their inability to perform them. This is especially true when they know other students can solve problems. This awareness of "not knowing" is often demonstrated by the "I could do it if I wanted to" defense mechanism. The result is that some students rarely attempt

to think through challenging problems and miss opportunities to extend their reasoning potential. The only way to break this cycle is to create a climate in which students are willing to take chances and think about their own thinking in more productive ways. Diverse grouping practices within a class group enable students to observe and perhaps model each others' thought processes.

As students think about how they are thinking, they develop what is called an "intensive introspection." Young adolescents seem to dwell on their lack of understanding and personalize feelings of inadequacy. Facilitating diversity in groups helps students reflect on a greater reality and a more diverse population so that they can determine where they fit in the larger picture that includes their peers.

The imagination of young adolescents continues to develop. If imagination becomes more vivid, students will be able to solve problems more creatively, look at issues in different ways, and develop their own answers to issues of process. Research indicates that creative learning environments are uncommon in low ability grouped classes and that they are more prevalent in upper ability classes (Brophy & Good, 1974). The result is that students in middle and low ability classes are frequently not exposed to creative problem solving. "Taken as a whole, research findings on modifying curriculum for more appropriate learning in grouped classes are disheartening. The existence of grouping seems to encourage teachers to change their teaching in ways which are detrimental to large numbers of

students and to adopt perspectives and procedures which fail to meet students' needs" (Trimble, 1988, p. 118).

It is important that all students receive creative problem-solving instruction. Middle grade students enter a period in which they experience heightened intellectual capacities. Concepts and generalizations previously accepted at face value no longer stand unchallenged. Reason and logic begin to dominate the mind if the intellect is valued and nurtured. We must ensure that reason, logic, and the ability to generalize are developed in all students and not limited to the few because of selection. "It [adolescence] can be a fragile time. It can also be an exciting time for adults who work with young adolescents. Because when human beings say for the first time, I have a future, I have a destiny, I am part of a generation; he or she is also ready to make a commitment to that future" (Lipsitz, 1979, p. 5).

Teachers' Perceptions and Individual Change:
Foundations for Teacher Thought and Action

Moving to heterogeneous grouping strategies requires teachers to undertake tremendous individual re-evaluation and change. It is the teacher who must alter his/her behavior, and it is the teacher who must be the major player in this decision-making process. Teaching a heterogeneous classroom requires that the individual teacher change and adjust to develop new strategies and teaching styles.

Goodlad and Oakes (1988) state that "Simply mixing students together will not solve the problems of tracking. Far more revolutionary changes are needed. For example, the curriculum best suited to providing all students with access to knowledge is organized around central concepts of the disciplines and grounded in real life experiences. The knowledge to be offered to all children must be important, challenging, complex, and, most of all, rich with meaning. Indeed, it must stretch the sense-making of all children" (p. 19). In recent years, many middle school educators in teams have facilitated the development of integrated units and themes. When students help design these topics, they are intricately involved in a meaningful relevant curriculum, but it changes the teacher's role substantially.

Merina (1989) maintains that "the key to dismantling tracking is to explore alternative ways of teaching the new groups. Switching the classes to heterogeneous groups and expecting the teacher to use teaching methods meant for homogeneous classes makes the teacher's job virtually impossible" (p. 11). Techniques and skills used for effective instruction in homogeneous classrooms, such as a lecture, are not conducive to effective instruction in the heterogeneous classroom.

If individual teachers must implement classroom changes, then ways of supporting these changes must be explored. When given encouragement and time for reflection and study, teachers can change.

Research can help teachers find answers to this complex issue of changing grouping practices. Strategies and methodologies have been "classroom tested" with heterogeneously grouped students. Cooperative learning, peer tutoring, and hands-on active learning are but a few examples. The research is available; teachers can be helped to change their behavior in classrooms.

Many educators in schools across the country have successfully changed their grouping practices. In a study funded by the National Education Association, Slavin, Braddock, Hall, and Petza (1989) note that "Teachers and administrators with whom we spoke were almost uniformly positive about their move to reduce ability grouping, but they also note that in making the change there were many obstacles they had to overcome....It's the fear of failure in doing something different that upsets the experienced teacher, ...'To me', commented a teacher, 'it's just something to try'; while another teacher said, 'Once I got into it, it was the best thing that ever happened to my classes!'" (p. 15).

Frequently, teaching is viewed as an individual activity. Teachers spend most of their days in their classrooms, rarely having an opportunity to interact with colleagues. Goodlad (1984, p. 186) observes that "Classroom cells in which teachers spend much of their time appear to be symbolic and predictive of their relative isolation from one another and from sources of ideas beyond their own background of experience."

Changing classroom practices necessitates changing individual behaviors. Glickman (1990, p. 45) cites research on adult development (Belenky et al., 1986; Harvey, Hunt, & Schroeder, 1961; Levinson, 1977; Loevinger, 1976; Neugarten, 1977; Whitbourne, 1986) and research on teacher development (Burden, 1982; Burke et al., 1987; Levine, 1989; McNergney & Carrier, 1981; Oja, 1979; Sprinthall & Thies-Sprinthall, 1982), which provide valuable insights into adult growth and change.

People learn at different rates and in different ways. Personal improvement must arise from the individual. Teacher improvement emanates from the individual and requires flexibility in its implementation. "Any improvement effort must begin with an acknowledgment of the complexity, richness, and diversity of the adult population of the school. In any school building, teachers and administrators are exploring diverse life tasks and stages, as individuals. These multiple perspectives and realities must be considered and planned for. Left unacknowledged, they can challenge, disrupt, and undermine the most carefully constructed change effort" (Capelluti & Ebersson, 1990, p. 3). Understanding that every member of the organization has a different starting point and a different agenda will aid the process of individual change.

Research and experience indicate that as individuals change, they move through "zones" of decision making. Golan (1981) describes ending, neutral, and beginning zones. This model can be used to understand the stages a teacher will go

through when changing from an ability grouped to a non-ability grouped class. During the ending zone, an educator recognizes a need to adjust to a change, to deal with feelings of loss or longing for the past, or to accept the situation and develop a new identity within the new framework.

Once an ending is recognized, a neutral zone develops. While in this zone, an educator may investigate and explore issues surrounding ability grouping. Tentative choices are then made, a direction is considered, but is not committed to yet. There is a point within the neutral zone during which an individual must deal with feelings of anxiety and frustration.

In the "beginning" stage, a choice is made, albeit tentative. New resources, solutions, skills, or roles are tried. As experience is gained, educators become more competent in their use of new skills, and can adjust to their new identity or role.

Knowledge of this transition can help individuals and others understand feelings and thoughts associated with decision-making. It is also helpful for individuals to be aware of their location in this process. Leaders who are supporting this renewal can benefit by understanding the process many individuals use to make decisions.

The process of growth is "...a never-ending series of free choice situations, confronting each individual at every point throughout their life, in which they must choose between the delights of safety and growth, dependence and

independence, regression and progression, immaturity and maturity. ...We grow forward when the delights of growth and the anxieties of safety are greater than the anxieties of growth and the delights of safety" (Maslow, pp. 45-46).

Glickman (1990) states that "Human motivation is developmental. Needs of a lower stage must be satisfied before a person is motivated by needs of the next higher stage. Stages are hierarchical: each person moves through them in the same sequence, from physiological needs to safety needs, to belonging and love needs, to esteem needs, to self-actualization needs. The rate of passage varies from individual to individual" (p. 181). A teacher at the stage of self-actualization is probably able to manage, to understand, and to support educational innovation and change; one who is not, will probably encounter difficulty. Decisions can be made, however, and changes can occur at any level of personal need.

How do people decide when and how to change? While there may be many different responses to this question, Wood and Thompson (1980) contend that "Adults will learn, retain, and use what they perceive is relevant to their personal and professional needs" (p. 376). The term "perceive" is an essential link between thoughts and actions, and relevant individual needs. Thus, perception is vital to the process of change.

Perception is a term frequently used in change, personal development, and teacher improvement research. However, it is often assumed that readers know what

perception is, how it is formed, and its impact on thought and action. Because teachers' perceptions are central to this research, the literature review will address these and other questions about perception, and clarify its role as teachers think about ability grouping practices.

What Is Perception?

It is often said that a person's perception is his/her reality. If, in fact, this is true, then it is important to know what perception is. How individuals sense the world about them is one definition of perception. "Perception can be considered as the first hand acquisition of information from the environment. Thus, perceiving is acquiring information via sensory systems about the object, places, and events of the world" (Husen & Postlethwaite, 1985, p. 3825). While perception is how an individual sees, touches, and smells particular events in life, it also goes beyond that definition.

Perception has an intuitive, psychological component that allows individuals to interpret the world around them. Bennett (1987) maintains that perception is how we look through events in our lives. "It is the part that causes each to think and act in a unique way making you, you, and me, me. It is the inner world of people and places that populates and gives shape to your dreams. It is the part that allows the two of us to share the same event in an external world and yet experience it in two significantly different ways. ...It is that part of human consciousness

that provides inner guidance which, like the automatic pilot on a great ship, gives the course home, the navigational instructions to follow, the route by which we can fulfill our individual destiny" (p. 3).

Barber and Legge (1976), in their book Perceptions and Information, state that, "Perception is about receiving, selecting, acquiring, transforming, and organizing the information supplied through our senses. It is about vision, hearing, smell, taste, touch, and more." Perception is all-encompassing and is how people make sense of the world around them. Thus it could be stated that "perception is fundamentally the exercise of the human senses" (Warnock, 1967).

Bartley (1969) states that "Perception is the immediate discriminatory response of the organism to energy activating sense organs." Bartley (1958) states:

The study of perception is not a simple direct task of accumulating easily obtained and easily understood data. Man is in a unique and peculiar position having to lift himself up by his boot straps. He needs to know about his environment and he needs to know about himself. He needs to come upon the principles that pertain to the interaction between the two. But, contrary to the logical necessity of the situation that he faces, he has no absolute starting point. He possesses no absolute knowledge of his surroundings. What he does possess regarding his surroundings comes by way of his own limited facilities that is his own sense organs, his own nervous systems, his own effectors, the muscles. It is these very mechanisms that he wants to test and understand. So what can he do? He can do no better than to use the facilities he has, his own abilities to experience and to conceptualize and to make order out of his encounters. (p. 20, First edition)

Numerous psychologists have used the term perception to refer only to an event and to the persons or organism primarily controlled by the excitation of sensory receptors due to the presence of a stimulus (English, 1958). Similar definitions will be found in Blake and Ramsey, 1951; Beven, 1958; Drever, 1964; Denber and Jenkins, 1970; Koffka, 1922; Lindsey and Norman, 1972; and Snygg, 1936.

The present study extends this definition. Perception is the interpretation that people bring to life. As Desiderato et al. (1976) state, "Perception is the experience of objects, events, or relationships obtained by extracting information from and interpreting sensations" (p. 128). Combs (1978) adds that perception "...refers not only to seeing but also to meaning--the personal significance of an event for the person experiencing it" (pp. 15-16).

Perceptual Differences

Because perception is processed individually, it makes sense that perceptions might vary. In fact, they vary in essentially two ways: (1) the way they are viewed externally, that is from outside the person, and (2) how they are viewed internally, from inside the person.

Within these two categories, there are many differences. Worth noting are social perceptions, which might operate differently when other people are involved (Bartley, 1969, Second Edition), and perceptions which are dependent on correct interpretation (Desiderato, 1977). Examples are the sensory, personal, or emotional

perspectives illustrated by an illusion. We are all familiar with drawings or pictures which can be viewed in different ways. Boring (1930) provides us an excellent example with his "young woman/old woman illustration. What one sees initially is either the old woman or the young woman. Who sees what picture is dependent on the individual.



Figure 1. Boring's young woman/old woman.

When perceptions relate to a person's body language, facial expressions, or demeanor, a person's characteristics are also subject to interpretation, and, therefore, misinterpretation. While these differences may seem problematic at first, it also allows for perceptions to be

modified. There exists an endless possibility in the perceiver for the construction of new relationships between the self and the environment (Bartley, 1969, p. 471, Second Edition).

Bartley (1958, First Edition) states, "Perceptions themselves are more than the apprehension of things and their activities. Perceptions pertain to the qualities of things and to abstract relations between things. Perceptions integrate into concepts and judgments. The process of integration in development goes on and on until the individual himself consists in an endless complex fabrication of ideas, beliefs, and systems of knowledge. Inherent in them is their constant reference to the reality outside the believer or knower. This is where the essence of knowledge is crucially involved. The typical individual feels that he knows he knows certain things with regard to these, it is difficult to shake them" (p. 113).

Thus, perceptions emanate from the world around the individual. They provide a framework for change and yet a stable foundation from which change is difficult. Let us now look at the role of perception in individual change.

The Role Of Perception In Individual Change

It is critical to view a person from an individual frame of reference. This picture has been called the perceptual, personal, or phenomenological frame of reference. This frame of reference expands and is directly related to individual behaviors. Of key importance here is

that "People do not behave according to the facts as others see them; they behave according to the facts as they see them. What governs behavior from the point of view of the individual himself is his unique perceptions of himself and the world in which he lives, the meanings things have for him" (Combs & Snygg, 1959, p. 17). Taken collectively, these facts form a perceptual field.

Combs and Snygg (1959) define a perceptual field as "the entire universe including oneself as it is experienced by the individual at an instant of action" (p. 20). Combs and Snygg (1959) speculate that when viewed from the self, this statement is rational and orderly; when viewed by others, it may seem irrational, filled with error, and illusionary. "But to each individual, his phenomenal field is reality and it is the only reality he can know" (p. 21).

The most important part of an individual's perceptual field is his/her phenomenal self. What a person thinks and how they behave is largely determined by the concepts they hold about themselves and their abilities. "How we act in any given situation will be dependent upon (1) how we perceive ourselves, and (2) how we perceive the situations in which we are involved" (Combs & Snygg, 1959, p. 122). Self concept and how people feel about themselves is extremely important. Since the purpose of a person's behavior is the satisfaction of his/her own needs (Combs & Snygg, 1959), the perceptual field is usually organized with reference to the behaviors that benefit one's own phenomenal self.

This field is so strong we seldom question our own perceptions. We accept them as if they were reality. Actually, to understand another person the only reality we need to be concerned with is what seems real to this other person. If people believe an event is so, then for them it is. This is the reality with which we must deal.

Perceptual fields also provide a foundation that organizes and forces the individual to protect against sweeping changes. However, as Combs and Snygg (1959) state, "It is apparent that people do change and look back. It is in looking back that we too can perceive that we have changed. However, changes are not drastic. They tend to be in small steps with a reference point back to the perceptual self" (p. 355).

If changes in self come about slowly and over a considerable period of time, then the self is in a constant process of change as a result of the continual interpretation of the world. Therefore, a person can change when he/she sees things in a different way, or from a different perspective. With this different way of seeing, individuals will often behave differently.

It can be stated that change requires individuals to encounter new experiences. These experiences must go beyond the intellectual level to a feeling level. How change in individual perceptions comes about is important. Combs and Snygg (1959) state, "Since perceptions are the product of experience, there is no more fruitful way of affecting our changing perception than through the medium of some kind of

new experience. It is rare that we are successful in changing perceptions either in ourselves or others simply by the process of telling. Perceptions do not change simply by 'willing' them, unless this process is accomplished by some kind of experience as well....This can be done in two ways. ...It is possible for us to change perception by exploring our old experiences to discover new meanings for them [or] ...perceptions can be changed as a consequence of seeking new kinds of experience which will produce new kinds of perceiving" (pp. 355-356).

When one speaks of behaviors and change, we must know what is changing. What we are is defined by what we do. Having insight is instrumental to change, but having it does not necessarily result in achieving the desired change (Wheelis, 1958), Wheelis (1958) states that "Personality change follows change in behavior. Since we are what we do, if we want to change what we are, we must begin by changing what we do; we must undertake a new mode of action. Since import of such action is change, it will run afoul of existing, entrenched forces which will protest and resist. The new mode will be experienced as difficult, unpleasant, forced, unnatural, anxiety provoking. It may be undertaken lightly but it can be sustained only by considerable effort and will. Change will occur only if such action is maintained over a long period of time" (p. 101).

Thus, change is often difficult for people. All of us have a basic field perception composed of information taken over time from our environment. This forms a solid

foundation from which behavior emanates. Changes in life experiences threaten this foundation, thus actions become difficult to change.

Individual Change In Educational Settings

Knowledge about teacher change can be inferred from what is known about individual change. "Educational change depends upon what teachers do and think. It is as simple and as complex as that. It would all be so easy if we could legislate changes in thinking" (Sarason, 1971, p. 193). If change in education is to occur, teachers will need to know themselves and be understood by others.

Fullan (1982) states that "change in a teacher is a highly personal experience....Teachers who will be affected by change must have the opportunity to work through this experience in a way in which the rewards at least equal the cost. The fact that those who advocate and develop change get more rewards than costs, and those who are expected to implement them experience many more costs than rewards, goes a long way in explaining why the more things change the more they remain the same" (p. 113). One can envision a school leader winning praise from parents and community members for new innovative programs, and many teachers resenting and resisting this innovation.

In an article, entitled, "Getting Reform Right: What Works and What Doesn't," Fullan and Miles (1992) state, "During transition from a familiar to a new state of affairs, individuals must normally confront the loss of the

old and commit themselves to the new, unlearn old beliefs and behaviors and learn new ones, and move from anxiousness and uncertainty to stabilization and coherence. Any significant change involves a period of intense personal and organizational problem solving. People need support for such work" (p. 748).

Fullan and Miles (1992) go on to suggest seven propositions for successful change in the school setting:

(1) Change is learning loaded with uncertainty. This first proposition for success is to understand that all change involves learning and that all learning involves coming to understand and to be good at something new.

(2) Change is a journey, not a blueprint. The development of a shared vision can be thought of as a journey in which people's sense of purpose is continuously shaped and reshaped.

(3) Problems are our friends. This means that assertively pursuing solutions to problems can result in new and creative ways of doing things.

(4) Change is resource hungry. Change requires additional resources for training, substitutes, new material, new space, and, above all, time.

(5) Change requires the power to manage it. Substantial effort must be devoted to such tasks as monitoring implementation, keeping everyone informed, linking multiple change projects, locating unsolved problems, and taking clear, coping actions.

(6) Change is systemic. That means that reform must focus on the development and inter-relationships of the system's main components: curriculum, teaching, teacher development, community, student support systems, and so on. Reform must focus not just on structure, policy, and regulations, but on deeper issues of the culture of the school system.

(7) All large-scale change is implemented locally. Change can not be accomplished from afar.

With these points as underpinnings for change in education, let us now turn our attention to other issues of individual change in the educational setting.

Teacher Efficacy And Beliefs

Teachers are an integral part of the classroom environment. Teacher expectancies and beliefs have been shown to influence student motivation and achievement; this has been demonstrated directly through observable teacher behaviors and indirectly through more subtle forms of communications (Brophy & Good, 1974; Dunkin & Biddle, 1974; Dusek, 1985; Good, 1981; Heller & Parsons, 1981; Parsons, Kaczala, & Meece, 1982). Teacher beliefs about their personal effectiveness have been the subject of several studies.

These researchers have suggested that teachers' beliefs about their personal efficacy influence students' motivation and achievement (e.g., Ashton & Webb, 1986; Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1979; Brophy &

Evertson, 1977; Eccles & Wigfield, 1985; Murray & Staebler, 1974; Rutter, Maughan, Mortimore, Ouston, & Smith, 1979). Although the relationship between teacher efficacy and student beliefs and attitudes is yet to be firmly established (Brookover et al., 1979), a number of studies have found a positive relationship between teacher efficacy beliefs and student achievement (Armor et al., 1976; Ashton, Berman, McLaughlin, Bass, Pauly, & Zellman, 1977; Brookover et al., 1979; Tracz & Gibson, 1987; Webb & Doda, 1983). Given these associations, differences in teachers' sense of efficacy could contribute to the decline in some students' beliefs about their academic competency and potential (Midgley, Feldlaufer, & Eccles, 1989). It is interesting to contemplate the impact of teacher efficacy in combination with the effects of ability grouping on the development of young adolescents. This combination may have near disastrous results for these learners. Conversely, what would happen if "educators consciously and carefully set about the task of providing experiences that would lead people to perceive themselves as adequate, worthy, self-respecting people" (Combs, 1976, p. 251). This would include ways of grouping students for instruction.

Combs (1988) states, "that educational reform must concentrate on ...altering the belief systems of the people who make the decisions and who do the work. The causes of behavior lie in people's perceptions or personal meanings-- especially in the beliefs that we hold about ourselves, situations we find ourselves in, and the goals and values

that we seek to fulfill. Recent studies have demonstrated that what makes good teachers is not their knowledge or their methods, but the beliefs that teachers hold about students, themselves, their goals, purposes, and teaching tasks" (p. 39). Thus teacher negative beliefs and expectations about low ability students in low tracks will impact negatively on students' learning.

Perception and Self Concept: Effects on Behavior.

Turning our attention to the effects of perception on behavior, action, and thought, "the factors effective in determining the behavior of an individual are those, and only those, which are experienced by the individual at the time of his behavior" (Combs, 1976, p. 18). Of course, a person's activities may seem irrational to other people looking at the behavior from an external point of view because they experience things differently. Thus as Combs (1976) so strongly stated, "People do not behave according to the facts as others see them; they behave according to the facts as they see them. What governs behavior from this point of view are the person's unique perceptions of himself and the world in which he lives" (Combs, 1976 p. 20).

Self-concept consists of those parts of the perceptual field that deal with the individual, and includes many perceptions varying in clarity, precision, and importance. The way perceptions are organized allows an individual to see who he or she is (Combs, 1978). As we mature, self-concept becomes more solidified, "generally speaking, we feel quite at home with 'what is me'; towards what is 'not

me', we are likely to be indifferent and even repelled" (Combs, 1978, p. 19). This would seem to indicate that change is at best difficult. It also suggests that to change behavior, it is necessary to change a person's perception of self, and the meaning that he/she might attach to it.

How might these principles apply to learning and to changing behaviors? Axline (1947) states, "that the problem of changing patterns of behavior or functioning is not motivational but perceptual." Powers (1973) argues that "attempts to manipulate and control behavior without regard for the internal detriments of that behavior will frequently, if not inevitably, lead to conflict. If a person's sense of adequacy is challenged or threatened by attempts at manipulation and control, he/she may retaliate in a similar fashion" (pp. 259-272). People bring their self-concepts with them wherever they go. Therefore, "people do not listen long to those who have no significant message" (Combs, 1978, p. 29).

Learning and Perception. When contemplating change as it relates to learning, interesting thoughts develop. Combs (1978) states, "Helping people achieve more satisfying ways of living and being is ...a matter of facilitating change in what people think and believe about themselves and the world....A fact for any person is what that person believes is so" (1978, p. 51).

A logical question might be: How may one change one's self-concept, belief, or perception regarding behavior and learning? Combs and Snygg (1959) believe that a basic

principle of learning is that, "Any information will affect a person's behavior only in the degree to which he has discovered its personal meaning for him." Though change is slow, a person is changing constantly. As people continually strive to maintain and enhance themselves in an ever-changing world, it is quite likely that they will come to perceive themselves in new and different ways.

According to Howe (1970), people perceive events in terms of their personal frame of reference and this significantly influences what they recall later. This is not uncommon to the experience of many educators; when an experience touches an individual personally, he or she will remember it, perhaps, forever. If this is true, then the impact of ability grouping on students could be long lasting. It also would have implications for teachers and their beliefs. If a teacher had a positive personal experience with ability grouping, he/she might be in favor of continuing the practice. Likewise, the reverse would hold true.

Summary

It seems logical that teacher perceptions are teacher realities, regarding ability grouping. Understanding teachers' perceptions will provide insights into how they think, and what they believe as it pertains to ability grouping. For those who would like to change ability grouping practices, it is important to remember that

"teacher change seems rooted in individual perceptions of self as influenced by experiences within classrooms and with teaching colleagues" (Smylie, 1988). It is also important to understand the thinking of teachers who are in favor of ability grouping.

C H A P T E R I I I

DESIGN OF THE STUDY

The design is presented in two parts: (1) the general rationale for utilizing qualitative research, and (2) the specific methodology used in this study. Qualitative research is the methodology of choice for this inquiry. It has enabled the researcher to best investigate teachers' perceptions of ability grouping.

Because of the complexities of this study, it was neither practical nor useful to utilize quantitative methodologies. The relationships between the use of ability grouping and the thought processes of teachers are complex and not quantifiable.

The use of qualitative research methodologies has generated a wealth of detailed information from a small number of teachers. By using such a narrow focus, this study produces deeper insights and understandings; however, this narrow scope also reduces the generalizability of the findings.

Specifically, this study utilizes phenomenology. Patton (1990) states that "Phenomenological inquiry focuses on the question: What is the structure and essence of experience of this phenomenon for these people? The phenomenon being experienced may be an emotion; loneliness, jealousy, anger. The phenomenon may be a relationship; a marriage or a job.

The phenomenon may be a program; an organization, or a culture" (p. 69).

The change in a teacher's use of ability grouping practices is a process (Wheelock, 1992). As such, qualitative research is appropriate. "Qualitative research is highly appropriate in studying process because depicting process requires detailed description; the experience of process typically varies for different people; process is fluid and dynamic; and participants' perceptions are a key process consideration" (Patton, 1990, p. 95).

Phenomenology is not only particularly suited to the objectives of this study, it is compatible with the skills and expertise of the researcher. These skills include many years of experience interviewing, developing interpersonal relationships, graduate study in guidance and counseling, and course work taken in preparation for this research.

Interviewing is compatible with the intent and design of this study. Patton (1990) contends that "Qualitative interviewing begins with the assumption that the perspective of others is meaningful, knowable, and able to be made explicit" (p. 278). He further states, "The fundamental principle of qualitative interviewing is to provide a framework within which respondents can express their own understanding in their own terms" (p. 290). Such a framework will provide rich data.

Sample Selection

Purposeful sampling is used. The intent of such sampling is to select "rich" sources that will yield abundant and pertinent information on thoughts and perceptions of ability grouping. Purposeful sampling also helped to maintain the focus of this study on teachers of seventh grade students in middle schools.

The selection of seventh grade teachers identifies a specific population that works with students above the elementary level and below high school level. Experience indicates that greater organizational and program flexibility exists at this level as opposed to grades eight through twelve. In addition, as grade levels increase from kindergarten to grade six, the diversity of the student population widens, and ability grouping practices become more common. Also, the selection of seventh grade teachers allows this study to report on a specific population and maintain manageability.

The selection of teachers was based upon the following criteria: (1) the willingness of teachers to participate; (2) the diversity of the middle schools in relation to size, student population, and setting (rural, urban, and suburban); (3) the teachers and school sites which provide the greatest potential for rich information; and (4) the extent to which ability grouping practices had been used (50% who use ability grouping, and 50% who do not use ability grouping).

Schools for this study were drawn from the Directory of Schools published by the Departments of Education in Connecticut and Massachusetts. Further reduction and selection of the sites was based on the schools' location and the researcher's professional knowledge. Principals were contacted by mail and telephone to assess the likelihood of participation of grade seven teachers. Written and oral communication with building administration in identified schools was used to solicit teachers. Documents used for this purpose are included in Appendix A, and B.

If teachers indicated a willingness to participate, the site selection survey was completed and returned (Appendix C). The information contained on the survey helped the researcher to select schools. Information requested included: (1) school size; (2) school location (used to determine geographic distribution and type of community: urban, suburban, rural); (3) the average cost per student as established by the state; (4) the organizational arrangement of the students and staff; (5) a brief description of past, present, and future grouping practices; and (6) a list of seventh grade teachers and the subjects they teach. When clarification was needed regarding any of these criteria, a follow-up telephone interview was conducted.

Thirty seventh-grade teachers from middle schools constituted the minimum sample size. This number is logical in light of the study's purpose, and the amount of time and resources available. Teachers were selected from lists submitted to represent the areas of math/science and the

humanities. Twenty-one teachers were selected from humanities and ten were selected from math/science.

Years of experience for teachers ranged from 4 to 35 years, with the average being 19.1 years. Years at the teacher's current school ranged from 1 year to 25 years. The average was 10.5 years.

Thirty-five interviews took place during May and June of 1992. Interviews were conducted in the participants' schools. There were four exceptions: three interviews took place in a private home and one in the researcher's school. Four teacher interviews were pilot interviews. The average length of interviews was twenty-eight minutes; twenty-one minutes was the shortest, and forty-four minutes was the longest.

The data from thirty-one interviews are used. Eighteen teachers used ability grouping and thirteen did not. Fourteen teachers were in favor of retaining the use of ability grouping and seventeen wished to eliminate its use (See Table 1, p. 64). Thirteen teachers were from urban schools, eleven from suburban, and seven from rural schools (See Table 2, p. 64). Nineteen teachers were female, and twelve teachers were male.

Of the eighteen teachers who used ability grouping, none were from rural schools, nine were from suburban schools, and nine were from urban centers. Of the thirteen teachers who did not use ability grouping, seven were from rural schools, two were from suburban schools, and four from urban schools.

Table 1

Ability Grouping:

Eliminate (E) or Retain (R) by Subject

E			E		
E R		R	E R	E	
E R		R	E R	E R	E
E R		R	E R	E R	E R
Math / Science			L.A.	S.S.	Other
			Humanities		

* * * * *

Table 2

Ability Grouping:

Use/Don't Use: Retain/ Eliminate

Type of School	#	Use	Don't Use	Retain	Eliminate
Urban	13	9	4	8	5
Suburban	11	9	2	5	6
Rural	<u>7</u>	<u>0</u>	<u>7</u>	<u>1</u>	<u>6</u>
Total	31	18	13	14	17

Educators from seven different middle or junior high schools participated in this study. In schools A, B, C, and D, interviews were conducted during the school day with coverage provided for teachers by the principal. In School E, teachers were interviewed during the team planning periods. In School F, interviews took place after school in teachers' classrooms. School G interviews took place in a private home. The brief descriptions indicate setting, number of students, average per pupil cost, and school organization of each school.

School A is in an urban environment with 860 students. Average cost per pupil is \$2,700. The school is organized as a middle school with interdisciplinary teams.

School B is in an urban environment with 920 students. The average cost per pupil is \$3,650. The school is organized as a departmentalized middle school.

School C is in a suburban environment with 490 students. The average cost per pupil is \$5,455. The school is organized as a middle school with interdisciplinary teams.

School D is in a suburban environment with 615 students. The average cost per pupil is \$4,225. The school is organized as a departmentalized junior high.

School E is in a suburban environment with approximately 500 students. The average cost per pupil is \$4,080. The school is organized as a middle school with interdisciplinary teams.

School F is a rural school with 390 students. The average cost per pupil is \$7,000. The school is organized as a middle school with interdisciplinary teams.

School G is in a rural environment with 521 students. The average cost per pupil is \$4,185. The school is organized as a middle school with interdisciplinary teams (See Table 3, p. 67).

Data Collection

Open-ended interviewing was used to collect data for this study. Patton (1990) states that "the purpose of interviewing is to find out what is in and on someone else's mind. The purpose of open-ended interviewing is not to put things in someone's mind, but to access the perspective of the person being interviewed. We interview people to find out from them those things we cannot directly observe" (p. 278).

An effective approach to assist data collection for an ethnographic study is a general interview guide. This technique requires that a set of issues to be explored are outlined. It allows the interviewer to adjust the wording and order of questions to respondents within the context of the actual interview.

"An ethnographic interview is a particular kind of speech event" (Spradley, 1979). While this technique is similar to a friendly conversation, it differs in both structure and purpose. Marshall and Rossman (1989) suggest that "the interview is not balanced... rather, the

Table 3

School:

Setting, Per Pupil Costs, Teacher Distribution,
Organizational Arrangement

School Code	Type	Per Pupil Cost	Number of Teachers	Organization Arrangement
A	Urban	\$2700	6	Team
B	Urban	\$3650	7	Department
C	Suburban	\$5450	5	Team
D	Suburban	\$4225	3	Department
E	Suburban	\$4080	3	Team
F	Rural	\$7000	4	Team
G	Rural	\$4185	3	Team

ethnographer asks most of the questions. Also, the ethnographer uses repetition to clarify subjects' responses. Finally, the ethnographer encourages subjects to expand their responses" (p. 92).

An interview guide was developed and helped direct the interview to ensure that relevant points were explored with all participants. It also guided the interviewer during the interview to ensure completion in a timely manner. Six kinds of questions were asked: experience/behavior questions, opinion/value questions, feeling, knowledge, sensory, and background/demographic questions (Patton, 1990).

The interview questions were piloted with four teachers. Post-interview sessions were conducted with teachers in their schools to obtain information about the clarity of interview questions and effectiveness of the interviewer's style (see Appendix F).

Pilot interviews showed certain weaknesses in the interview guide. After each interview, revisions were made with reference to wording and the order of questions. Some questions were eliminated and others added. After the fourth revision, and the fourth pilot interview, the researcher felt comfortable with the interview questions.

All interviews were tape-recorded and transcribed. Field notes were taken during and after each interview to document any unusual situations or occurrences. All interviews were conducted in environments that were reasonably free of interruptions. Settings included: conference rooms, a small group instructional area,

libraries, and offices. There were no major interruptions or equipment failures with any interview.

To help ensure content validity, a "member check" was done. All transcriptions of interviews were completed within one month, and sent to all teachers who participated in the study. Teachers were asked to read the documents and comment in writing about the content validity of their documents. This procedure answered the question of whether the researcher recorded and transcribed accurately the main points and essential ideas of the participants. Any suggested corrections were compared to the original tape recording, and, if necessary, changes were made. Three minor alterations were made.

In addition, a "tape and transcript" check was performed to ensure the accuracy of the transcription. Individuals were asked to listen to audio tapes of interviews and compare them to printed transcripts. This was accomplished by three teachers not associated with this study or the researcher. Again, only minor changes were necessary.

Data Analysis

The first task of qualitative analysis is to describe the goals, activities, number of participants, and settings. The second is to organize the data. Transcription of all interviews provided a rich source of raw material. In order to manage the volume of data, information was coded by

classifying words or phrases. This made for easier retrieval and organization of the data. Pattern coding was also used to report and assist in interpreting results (Miles & Huberman, 1984). "The purpose of qualitative inquiry is to produce findings. The process of data collection is not an end in itself. The culminating activities of qualitative inquiry are analysis, interpretation, and presentation of findings" (Patton, 1990, p. 371).

Guba (1978) suggests several steps for analyzing and categorizing data. The process begins by looking for "recurring regularities" which in turn can be sorted into categories. These categories should be judged by two criteria: "internal homogeneity" and "external heterogeneity". Internal homogeneity means that the data must "hold together," while external heterogeneity means that the data must be seen as distinct from other categories of data. "The existence of a large number of unassignable or overlapping data items is good evidence of some basic fault in the category system" (p. 53). Within-site, cross-site, and content analysis of the data was conducted to identify specific themes and frequency of their occurrence of these themes.

The three judges were a middle school administrator, a person with research experience in ability grouping, and a middle school practitioner whose experience includes both using and not using ability grouping. The judges reviewed the same two episodes and the resulting conclusions of the researcher. They were asked to please (1) read each

transcription (2) identify key perceptions of the teacher (3) categorize their perceptions (4) compare their findings with those identified by the researcher, and (5) indicate any differences found.

Each judge reported similar key perceptions in each episode. On average four to six teacher perceptions were either excluded or identified as important by the judges, but not the researcher. None were repeated among the judges, therefore, differences were considered unimportant. The judges' knowledge and expertise enhanced the reliability of the study because their individual interpretations of the data resulted in substantial agreement among all judges. This ensured that key perceptions, subcategories, and categories, were consistent and accurate (See Appendix G).

Summary

In summary, data to achieve the objectives of this study were obtained by interviewing teachers in schools in Massachusetts and Connecticut. The data are reported in narrative format. Findings are reported by themes that developed as the data were analyzed. Generalizations arising from analysis of the data and suggested areas of further study are also presented.

C H A P T E R I V
D A T A A N A L Y S I S A N D F I N D I N G S

Data are categorized into seven groups: findings by setting, findings by subject, definitions, educational beliefs, personal dilemmas, advantages, and disadvantages of ability grouping. Alternative grouping practices used by teachers to replace ability grouping are also discussed.

Each transcription was analyzed to identify statements of thoughts and beliefs that best illustrated either perceived advantages or disadvantages. The data analysis of both advantages and disadvantages of ability grouping spawned four general themes: (1) student issues; (2) parent issues; (3) curriculum and instruction; and (4) teacher issues. Subcategories also emerged within three of the four themes. Subcategories and themes remained consistent throughout the analysis of data. Few changes were made as data were analyzed and findings emerged (see Table 4, p. 74).

Of the thirty-one educators interviewed, all except one had used ability grouping during their teaching. This person was from a suburban school. Seventeen had used other ways to group students in addition to ability grouping. Thirteen participants who wished to retain ability grouping had not been exposed to teaching in a non-ability grouped situation.

Only one educator, from a rural school, had used both ability grouping and other forms of grouping and was in

favor of ability grouping. Of the seventeen teachers who wanted to eliminate ability grouping, all but one had been exposed to both. A conclusion might be that for educators to successfully eliminate ability grouping, they may need to experience both ability grouping and non-ability grouped instruction. For institutions that prepare teachers, this may be important.

Because ability grouping was and is common in many public schools, many individuals have participated as students in ability grouped classes. They may also have been successful in these classes. In order to properly prepare teachers, teacher education programs should include practicum experiences in non-ability grouped classes. This will balance other experiences prospective teachers may have had with ability grouping.

Participants were asked to state whether they would choose to eliminate or retain ability grouping based on a scale of one through six, with one strongly in favor of eliminating ability grouping and six strongly in favor of retaining ability grouping. (see Table 5, p. 75)

Participants were divided into two groups based on their responses to this question. The R group consisted of those who answered with either a "4", "5", or "6". The E group consisted of those educators who answered with either a "1", "2", or "3".

Table 4

Ability Grouping: Categories & Subcategories

STUDENTS

Students' Self-Concept
Satisfaction
Increase Student Learning
Better for: Top, Middle, Low
Motivation, Participation, Expectation
Adjust to Style
Problems With Low Groups
Stigma, Elitism, Superiority
Learning, Frustration
Develop Labels
Students and Teachers
Discipline
Students Working Together
Modeling, Interaction with Peers
Placement Issues
Testing, Differences
Diversity
Cultural
Real World

PARENTS' AND THE PUBLIC'S ROLE IN EDUCATION

CURRICULUM and INSTRUCTION

Pace and Rigor of Instruction
Faster, Slower, Standards
Cover More, Challenging, Enriching
Narrows Range of Students
Competition
Different Materials and Methodologies
Books
Materials
Resources
Strategies
Improved Skills, Preparation
Issues Associated with Mathematics
Class Size

TEACHERS

Ease or Difficulty of Teaching
Expectations and Professional Development
Reading
Research
Professional Organizations
Trends
Personal Thoughts and Reasons
Beliefs and Attitudes About Education

Change Issues
 Limiting Factors
 Tradition
 Years in Education
 Failures of Past Innovations
 Fear
 Willingness to Change
 Enhancing Factors
 Present System Not Working
 Willingness to Try
 Influence of Middle School Ideology

* * * * *

Table 5

Ability Grouping:
 Eliminate/Retain Continuum

	X				
	X				
	X				
	X				
X	X				X
X	X		X		X
X	X		X		X
X	X		X	X	X
X	X		X	X	X
X	X	X	X	X	X
1	2	3	4	5	6
Eliminate					Retain

An equal number of educators (six) were at the extremes, the "1" and "6". Of particular interest were the "2" ratings. Ten teachers wishing to eliminate ability grouping seemed clear in stating their preference as "2", compared with those wishing to retain it by stating a "5". Only three educators chose "5".

Focusing on the "3" and "4" middle ratings, it seems that educators who want to retain ability grouping are not quite as adamant about their choice. There seems to be some hesitancy to make that decision. They tended to gravitate toward the middle. Perhaps they are aware of some of the many disadvantages of ability grouping and wonder if another grouping method would be better. These results, combined with teacher comments, suggest that R group teachers know the limitations of utilizing ability grouping and yet do not believe that its elimination is desirable.

Just the opposite is true for rating scale number "3". Only one person chose this number. The inference is that those educators wishing to eliminate ability grouping are more emphatic about their opinion than those choosing to retain it. Perhaps they feel strongly that the disadvantages far outweigh any advantages of ability grouping.

Teachers in both the R and E group stated advantages of and reasons to retain ability grouping. Similarly, disadvantages and reasons to eliminate ability grouping were also identified by teachers in both the R and the E groups.

Findings by Setting

Thirty-one educators were selected for this study from urban, suburban, and rural schools. There were eight urban educators who wished to retain ability grouping and five who wished to eliminate it. Of the eleven suburban educators, five wished to retain ability grouping and six wished to eliminate it. This was the most balanced category of the sample. The greatest disparity of distribution occurred in the rural school district where only one educator wished to retain ability grouping and six wished to eliminate it (see Table 2, p. 64).

A logical inference is that educators in smaller rural schools do not perceive the need for ability grouping. Rural areas may not have the intellectual, cultural, and socio-economic diversity of urban areas. In addition, urban areas have larger numbers of students, enabling different grouping patterns to be established in a cost effective manner; small numbers of students make it cost prohibitive.

Findings by Subject

Participants were divided into two subject groups: (1) the humanities, including language arts, social studies, foreign language; and (2) a math/science category. There were twenty-one teachers in the humanities group: ten language arts, eight social studies, one guidance, and two foreign language. Of these, thirteen teachers wished to

eliminate ability grouping and eight teachers wished to retain it.

Ten math/science educators were interviewed, seven from math and three from science. There were four math/science educators who chose to eliminate ability grouping and six who chose to retain ability grouping. Of note, is that no science teacher favored eliminating ability grouping.

One science educator wanted flexibility of ability grouping practice; that teacher was a rural educator. He wanted the opportunity to group students based on activities, skills, projects, and ability. Other data did not reveal any other specific reasons why science teachers wished to eliminate ability grouping. Thus it is assumed that the sample size affected this finding.

Four math teachers wanted to eliminate ability grouping and three wanted to retain it. This is interesting because math is often perceived as sequential and therefore conducive to ability grouping practices. The math teachers choosing to eliminate ability grouping have an average of fourteen years in education. Those wishing to retain ability grouping have an average of twenty-three years. No other differences between the two math groups were evident (see Table 1, p. 64).

Definitions of Ability Grouping

Both the R group and the E group defined ability grouping utilizing a variety of responses. A number of

factors entered into their definitions; achievement, performance, conduct, and test scores were among the criteria mentioned.

The following definitions typify responses:

"Essentially it means dividing students into sort of groups where achievement would be expected to be equal" (urban, using ability grouping, math/science).

"Ability grouping is a practice of putting students together based on standard test scores, previous academic achievements, and teacher recommendations" (rural, not using ability grouping, math/science).

"Ability grouping is a grouping of students according to their academic ability based on standardized test scores. They might move a student who might not test well but performs well into a higher level" (suburban, not using ability grouping, humanities).

"...some kind of achievement based more on what the students have achieved previous years versus what they are able to do" (urban, not using ability grouping, math/science).

"Ability grouping should be ...people somewhere around the same ...skill level. [It] sometimes has to do with conduct....Those that are the most conscientious and willing to try seem to be placed in the high group" (suburban, using ability grouping, humanities).

"I guess my definition is in the traditional sense of reading groups, set by someone who had tested the youngsters

and this is where they are found in their abilities" (rural, not using ability grouping, humanities).

"Ability grouping is organizing students by their math ability" (suburban, using ability grouping, math/science).

"The performers versus the non-performers" (urban, using ability grouping, humanities).

No noticeable differences were evident between R group responses and E group responses.

Teachers seem to define ability grouping in terms of their own experiences. Definitions are consistent with research. Thus a reliable link may exist between theory and practice.

Beliefs and Values of Teachers

Beliefs and values about education seemed to be anchors for people's thoughts. Typical belief statements for the R group were:

"...Self respect is probably the key to a lot of things. It is a hard thing to develop in some students. Their home lives are tough. The problems they have in school are very minor. They are big to us; but when you hear some of the stories of what these students face at home out in society, these are minor. A kid flunks a test Big deal. He says, 'You ought to see what happens to me when I go home. I worry about getting shot or something else.' Those are tough things and I guess sometimes we overlook that or don't think

about it all the time" (urban, using ability grouping, humanities).

" [When] you go to college you are ability grouped. I hate to tell you, you don't go to college with somebody who is in a '4' group or '3' group. You hang around with kids that have all your same ability. You find yourself, you seek yourself even in life, so why this big deal about having everybody mixed together?" (urban, using ability grouping, math/science).

"You can't force education down a kid's throat, and I think that this is a big mistake that we are doing today. You know you have to say you don't want to learn, then do the best you can because I explain to my kids I know what you need to know. This is what I am trying to impart on you--your skills, being able to do things, knowing general information, so that you appear smart, you know, and that you can talk intelligently to people about different subjects. And I said 'You know, if you don't want to do that I can't force you, but some day you will want to do that.' And maybe they never will, maybe they will be as happy as larks so why force it?" (urban, using ability grouping, math/science).

"The higher ability students' parents seem to take a much more active role in the educational process....I don't know if that's the chicken and the egg. I don't know if the parents at this point are discouraged with all the negative reports in a sense that they hear or whether that began in grade 1. And maybe that's why the student has fallen off

because they don't have the parental involvement, or the parental assistance at home for helping on homework or whatever" (suburban, using ability grouping, humanities).

Typical belief statements for the E group were:

"I'd have to say that in defense of kids and what we need in this country, and we need a country where people know how to respect each other. And I think right now, even more important than content is values. And kids learning to work with each other and live with each other and having some empathy and sensitivity towards other people. And I guess I see it as a top priority and I think we've kind of...I don't know whether it's universal, but I think we've been missing the boat in the past few years because of things like detail, red tape, schedule. I think that things like heterogeneous grouping are becoming subservient to schedules. And it really bothers me. You know, I guess, I wish that we could just rearrange our priorities and say, what's really the right thing to do to give the kids a better education? And I guess I just feel we're slaves to the way the school's operated and it's time that we have some creativity, that we sensitize kids more to people and to their world. And let them know that they've got an open door in their lives. And I think a lot of kids, especially in our district, don't see that" (rural, not using ability grouping, humanities).

"I really don't think ability grouping is like our society. To take 15 or 20 kids with supposedly similar ability on paper does nothing to help them exchange ideas or

seeing what other people are like or challenging their thoughts. We tend to group them and then personalities almost matched. I think by letting, and it is even a form of integration, let the kids get mixed up so that they learn how to cooperate in society" (suburban, not using ability grouping, humanities).

"I just feel that when we're teaching students, we're not just teaching math. We're teaching all sorts of problems. Each person comes into the room with his own reason or emotion for not learning or for learning. They carry that bag of rocks around with them and we have to learn to deal with it as it is. And this is the bag of rocks that's keeping us from using ability grouping. If all other things were equal, ability grouping makes very good sense. But all other things are not equal" (suburban, using ability grouping, math/science).

"I guess I'd say in my opinion, my attitudes changed, if anything for the better, towards heterogeneous grouping. I'm much more in support of it. Well, let me put it this way. I would fight for it. ...I don't know whether I would have felt this strongly about it as I do now" (rural, not using ability grouping, humanities).

R group teachers tended to discuss individual limitations or parent involvement. E group teachers tended to discuss broader issues such as cultural diversity. They felt that non-ability grouped classes are better for our society and its future because it prepared students in a similar community.

Dilemmas and Questions

Dilemmas and questions about ability grouping were raised by both groups. Even though teachers held to their opinions, members of both groups had questions and concerns about grouping issues:

"I don't know that this issue is clearly one way or the other" (urban, retain, using ability grouping, humanities).

"I wonder if those same kids would have the same attitude if they were mixed into a group and think that I do better than the other kids do; there would be a reverse thing with lower groups" (suburban, retain, using ability grouping, humanities).

"The individualized part of it, how I would do that, I don't know" (suburban, using ability grouping, humanities).

"I think in science there's a real need for homogeneity in certain levels. The large broad paintbrush stroke for me is gonna be heterogeneous grouping. So how you put the two together I'm still trying to figure that question out" (rural, retain, not using ability grouping, math/science).

"Well, I'd like to try those who don't, who aren't in these four groups, to give them an opportunity to get in with these others and to see at what level they can really perform. I don't know how that's going to be with behavior problems. This is another thing that...that's the only thing that gives me concern. What do I do with a student who does nothing? And I can't get him or her to do anything. And if their disrupting influence...that's the only thing

that...it's not the ability so much as it is the disrupting influence. What do I do with this student who doesn't come in with his books, doesn't come in with his pencils or pens or notebook, or comes in and just does nothing? Then wants to be a bother to the class. There's the problem" (urban, eliminate, using ability grouping, humanities).

"I'm looking forward to [heterogeneous grouping], but I'm a little nervous about it. It doesn't seem like as a big a deal as some people are making it out to be. I think I can go in and do it, but, yet, maybe I can't. I don't know" (suburban, eliminate, using ability grouping, humanities).

"I don't think that there's anything totally to replace it with and that's one of the scary things and that's why some people are so turned off by it" (suburban, eliminate, using ability grouping, humanities).

"Advantages of heterogeneous grouping are, well it is kind of an advantage and a disadvantage in one way, they can aspire, they can see the role models in other ways, they can end up feeling really stupid, and [feeling that they] can't compete because I heard this kid read so that is kind of a double-edged sword" (urban, eliminate, not using ability grouping, humanities).

Both R and E group teachers recognize that ability grouping students is a complex issue. There is no one way to group students and thus their uncertainty becomes evident.

Perceived Advantages of Ability Grouping

Analysis of data revealed that the R group stated more advantages of, and reasons to, retain ability grouping than did the E group. Conversely, the E group stated more disadvantages of, and reasons to, eliminate ability grouping than did the R group. While certainly not surprising; nonetheless, the R group stated more disadvantages of ability grouping than they did advantages. A conclusion might be that R group teachers recognize the limitations of using ability grouping but cannot envision alternatives.

Student Issues

The first category is the impact of ability grouping on students. Overall this category elicited the greatest number of responses from teachers. Teachers were most concerned with students' self concept and their learning.

Student Self-Concept. Teachers who supported ability grouping believe that it enhances students' self-concept and increases student satisfaction. Typical R group teacher statements were:

"They talk about putting kids into heterogeneous groups for self-esteem, but I don't think that helps them at all. I think that it works against it. I think that a child who has trouble in math is only frustrated to see someone so far superior and they can't keep up. We also have a substantial number of students who have not memorized number facts by seventh grade; and when you are giving an explanation to a

child whose scores are off the range and they are completely understanding it and this child is not, that cannot help self esteem" (urban, using ability grouping, math/science).

"I would find for the '3' and '4' groups that I think that the success there depends a lot on the teacher; but I find that if a child has success, he will achieve. Now whether he is achieving only a little bit versus the student who is in the high group and achieving a tremendous amount yet he has some success and I think that it is extremely important for self-esteem for the student. They have to feel good about themselves and if they don't you are not going to get much out of them." (urban, using ability grouping, humanities)

There were far fewer comments regarding the advantages of ability grouping from teachers who wished to eliminate ability grouping practices. Student satisfaction and self-concept were identified by E group teachers as a major issue:

"You can do so much more with your '1' and '2' groups. ...They take correction, they're willing to do things, their frustration level isn't as high as the '4' groups" (urban, using ability grouping, humanities).

"Some people say, and there is truth to that, that if you put a very slow person next to an Einstein, it is not going to make that person into an Einstein and that it might make that person feel worse about themselves" (suburban, using ability grouping, humanities).

Increase Learning. A number of comments from both R and E group teachers centered around the issue of increased student learning. Typical teacher comments were:

"It was never my purpose to flunk anyone if I could avoid it, so I personally have been satisfied with ability grouping as a teacher" (urban, using ability grouping, humanities).

"We have all kinds of programs for the child who has low ability. We have nothing for the accelerated student. ...I think we have a lot of students who could be called accelerated....I think they are missing out in a regular classroom with a heterogeneous group" (urban, using ability grouping, humanities).

"No matter what kind of group I've had, whatever heterogeneous type of situation I've had, the kids who don't seem to shine sometimes will often be the kids who offer some really perceptive ideas--especially when you do group work, add a lot to a group. And it gives them an opportunity to see that they have more ability than they think they do sometimes. And certainly it does bring out the best in some kids" (rural, not using ability grouping, humanities).

R Group teachers frequently stated that ability grouping is better for the top group of students. Many R group teachers seemed to be saying that somehow top students are more deserving. Some seemed to be saying that if they had a choice between helping all students and pushing the top students, they would opt for the latter:

"I don't think that we are servicing either the youngsters that have the better ability or the ones that need the extra work with heterogeneous grouping" (urban, using ability grouping, humanities).

"I think that there is a certain percentage within the school that needs to have the flexibility to move ahead to explore as much as they can without being slowed down by the students that can't keep up" (urban, using ability grouping, humanities).

"[In a] heterogeneously grouped situation you know, I think the top kids suffered. I think he had to give too much up in order to have that kind of a program. It was probably fine for the middle of the road or the bottom kids, but I don't think that anybody who has to help and that is exactly what it is. They are always pulling up the reins of the bottom of the barrel. I don't think that's right" (urban, using ability grouping, math/science).

"The higher the ability I find in my students the more I have them work stressing essay type material--more thought process instead of just verbatim" (suburban, using ability grouping, humanities).

"By having them together you are able to focus on their shortcomings and build those shortcomings up so they will be successful" (urban, using ability grouping, math/science).

R group teachers also discussed student motivation and teacher expectations:

"I think our society is pushing that everybody is accomplished material. Everybody has to graduate from high

school. When I was a kid, somebody had to sweep the streets, somebody did not want to go to college, somebody was not college material even though they had a very good ability maybe. Just did not like it. ...I ran into a custodian at the high school and said to him something about don't you regret dropping out of school. 'Absolutely not, I hated school.' As a custodian in the local high school this is what he does for a living. He doesn't regret it for one minute that he didn't graduate from high school and he said no one could have motivated him" (urban, using ability grouping, math/science).

"We can't focus our whole educational process on thinking that they are all going in the same direction. You have to sometimes, they have to sometime in their life. They have to realize I don't have the ability to be a pro football player I have to do something else and the more you say, 'Oh yes, you can do anything you want,' and everybody is exposed, the more depressed these kids get because they can't reach their goals. I think they have to be realistic, and I think you have to put them in a realistic situation. Then realize they have shortcomings and they have to overcome them. I think trying to disguise it in a heterogeneous group situation is not a good answer. I don't think" (urban, using ability grouping, math/science).

Increased Learning With Lower Groups. Those teachers who wished to retain ability grouping expressed many statements on low students, their learning or their frustration with learning:

"They had the reading level of a beginning second grade level. To put them in with someone who is reading at a sixth grade level would have been, I think, an abortion to the whole system of education. By putting them in their own group with their own people, they weren't as discouraged when they saw how badly they read; but in comparison, they weren't subjected to somebody, you know, just rattling it off when they were struggling" (urban, using ability grouping, math/science).

"He can always have a feeling of success that he will never feel in a heterogeneously grouped class, because he will always be the bottom. He will know he is the bottom; but at least if he is homogeneously grouped and he is at the top of that group, he will feel success" (urban, using ability grouping, math/science).

"Without success, you lose the student and they turn off completely from school. Some students simply can't write, let's say, a 100 word composition in a 40-minute period, whereas he might write 25 words and put a lot into it and it is not going to be the same with what a top group is doing. He should be given the grade [based on] his ability, versus the [ability of the] top group" (urban, using ability grouping, humanities).

"The brighter kids are going to get by and they are going to make it but the low group is not, and those are the kids that we have to save and those are the ones that I worry about" (urban, using ability grouping, humanities).

"[Ability grouping] would give a better opportunity for remediation" (suburban, using ability grouping, humanities).

Student Discipline. The issue of student discipline was a part of the discussion for the R group. The following statements are typical:

"I think probably one of the biggest stumbling blocks to education is discipline. I would just wonder if the discipline problem would be much greater in the class that is completely mixed....If you have five classes that are all mixed, ...now would you have five classes with problems instead of 1 or 2? That is a question to me and discipline is much different than it used to be. I guess it is the structure of the world; I guess violence and disagreement and attitude of not caring is prevalent in school. If parents don't take part and the kids don't respect themselves... I find so much of that, and I find that one of the saddest parts of education today" (urban, using ability grouping, humanities).

"I think behaviorally. Generally, if you walk into a top level class, you'll see more appropriate behavior, especially at this age group. They're generally students that it's pretty obvious, they want to please. They do well; they just want to know what they have to do and they do it" (suburban, using ability grouping, math/science).

Ability grouping seems to consolidate discipline problems into certain groups, usually the low ones. Teachers are concerned that non-ability grouped classes may be susceptible to discipline problems. By implication, teachers

are concerned that top students will no longer be in classes where good behavior is expected and found.

Student Placement Issues. A few teachers perceive the placement of students into groups to be accurate and thus an advantage of ability grouping. Here are two comments from teachers who believe that students are grouped accurately. As we will see later, accurate placement is viewed as problematic by both R and E group teachers:

"The major advantage would be that the students don't have to worry about being embarrassed in front of other students because they can't read as well or don't comprehend as well. They are all basically on the same level and they have the same interests. You can move along at the same basic pace" (urban, using ability grouping, humanities).

"It works much better in that you can accomplish more tasks, and they are able to share with one another, they are able to accomplish more material, and they get a better sense of satisfaction and can accomplish what they set out to. You can set some reasonable goals and they can accomplish that even right straight through all of the groups" (urban, not using ability grouping, humanities).

R group teachers perceive that students' self-concept is enhanced in ability grouped classes by limiting unfair competition. They further believe that increased learning may take place particularly for top group students. They believe these students will not be held back. One R group teacher believes that ability grouping reflects the "real world".

Teachers in both groups seem to believe that lower group students are better served through ability grouping. They seem to believe that these students will get the help they need. Discipline is perceived as better in top and middle groups and as manageable in low groups. Thus, ability grouping offers some advantages regarding the issue of student discipline. Lastly, student placement is often perceived as accurate, enabling teachers to place students in appropriate ability groups.

Parental Issues and the Public's Role in Education

The second theme is parental concerns about and influence on ability grouping. Equal numbers of comments were registered by both the R and the E group. Comments centered around parent expectations and demands of the educational system on their child, and comments on the public's role in education.

R group teachers said:

"I think we see that parents are very aware of what is going on and they want their child in certain classes they want certain subjects (the advanced courses) and so forth and I guess it is just a general way in our country is those who achieve higher are going to do better. That certainly has probably been the driving force behind [ability grouping], I think" (urban, using ability grouping, humanities).

"Our society is a society where competition is important. It's important to be number one. Is my child in the top group? God, if my child is not in the top group, it's not going to sound good at the bridge game this afternoon. I would say the competition factor that society places on us, that it places on parents and the parents place on the kids and then it's placed on the school, the educators ...and that's probably it, the competition" (suburban, using ability grouping, math/science).

"Because the parents are concerned with the status and the issue of self-esteem" (urban, using ability grouping, math/science).

"I think a lot of [controversy] comes from parents who are parents of the 'gifted' kids" (rural, not using ability grouping, humanities).

"The low level kids tend not to have the parents who are waving flags, and in the middle, it depends. You know those. Let's face it. The kids at the top and their parents are part of a very competitive society and ...they feel their kids are being held back and I think probably in some cases that may be the case if the teacher hasn't adjusted to the new population" (rural, not using ability grouping, humanities).

"...People with very bright children get very offended by the fact that I say that they learn from the other children. They do not want their child to be used as a teacher..." (urban, not using ability grouping, humanities).

Both the R and E group teachers had concerns about the public's role in education. Of interest are these contrasting statements between R group teachers and E group teachers:

"...Because there is a perception on the part of the public that children aren't receiving an education. They have to blame it on something, so let's blame it on how the kids are grouped" (urban, using ability grouping, humanities).

"The parents, the higher level parents who didn't care to see through the fog, felt of course that their children would be hauled off into court in a matter of months because their learning would not be the same. Drugs, rapes, and crimes carried on because, God forbid, they should be in the same room with someone who isn't as strong in English or math or something" (suburban, not using ability grouping, humanities).

"I think parents are up in arms because they just feel that. I actually have to say it's mostly the parents of kids who are the higher ability kids, because those are the ones who, in our district, keep in touch with it--with education. And I think that they're really on the wagon against it because they just feel that their kids are not going to be challenged enough. And I think it's difficult for them to understand how hard it is for the kids at the other end. But these are the parents who are the most vocal. They're going to go to school committee, and they're going to come in to see the administration and really voice their opinion

because they feel that their kid is going to lose out. When in the long run, learning of social skills is going to be so much more important in dealing with life, lifetime situations. I think that people, if they really put time into reading some of the research or listening to people talk about research or going into classrooms where heterogeneous grouping is in effect, I think they may see a different side of it. But I think it's a change and I think it represents a threat to people. They don't always understand it. And they can't see another person's point of view either. They can't see what's happening to some of the other kids on the other end" (rural, not using ability grouping, humanities).

Both R and E group teachers perceive the parents to be influential and supportive of ability grouping. Pressure to retain ability grouping seems to come from parents of higher level students. No teacher mentioned a parent of a low or middle level student who is supportive of ability grouping. Competition, status, and the public's general frustration with education also seem to contribute to the continuation of ability grouping.

Curricula and Instructional Issues

Teachers who support ability grouping consider curriculum and instruction to be critical issues. Both R and E group teachers raise it. Teachers generally believe that increased learning will take place when ability grouping is used, therefore this finding is not surprising.

Pace and Rigor of Instruction. Both R and E group teachers cited the ability to pace instruction as an advantage of ability grouping. They perceived that teachers could move faster or slower in addressing the curricular needs of students.

"I'd hate to see either one of the ends of the spectrum get lost in the shuffle, that we have to slow down too much for the benefit of the low ability student or to go too fast for the low-ability. That's the biggest concern I have, not that I wouldn't be willing to experiment" (suburban, using ability grouping, humanities).

"I mean, given my preference, I would rather have homogeneous grouping....I can move them along in the material....I worry about the kids who truly are gifted. ...I felt like the kids in the center were really getting the meat and the other kids in the other two levels were kind of left to catch as catch can. I felt badly about that" (urban, not using ability grouping, humanities).

Many teachers talked about their ability to offer a challenging curriculum and to cover more material in ability grouped classes. R group teachers mentioned:

"We don't want to water down the courses to mediocrity....We don't want any educational system to go through a period just looking for mediocrity" (suburban, using ability grouping, humanities).

"If we have a group of kids that really are fired up [about] science and math, then we shouldn't hold them back. I like that competitive edge in the higher flying ability

group....If I've got a group of kids who want to use microscopes [and] who love to read, I don't have to be weighted down trying to pull the rest of the group along with me" (rural, not using ability grouping, math/science).

"I think that if they were heterogeneously grouped, the smart kids would have to suffer and we would have to stop and explain things. The bottom ones really have to be spoon-fed the information because they can't read the material. At least the books that I have at their level are a reading vocabulary level that they can understand" (urban, using ability grouping, math/science).

E group teachers frequently discussed the ability to challenge and enrich students and to cover more material. Other responses centered around increased student learning and the belief that ability grouping was better for top, middle or low groups:

"They get a better sense of satisfaction and can accomplish what they set out to. You can set some reasonable goals and they can accomplish that even right straight through all of the groups" (urban, not using ability grouping, humanities).

"I think too many people believe that by ability grouping, those kids will fly, and won't be held back, but my issue is the way the teacher approaches teaching the classroom" (rural, not using ability grouping, humanities).

"The advantage exists for some higher-level students if they're grouped together as a group to move forward. The advantages that there would be for the lower level to give

skills that would be similar for all those students" (rural, not using ability grouping, humanities).

Narrowing the range of student ability for instruction was mentioned by one E group member, who saw this as an advantage of ability grouping.

"I guess it's nice to be able to be in a classroom amongst students who supposedly are at the same level, There's a comfort in knowing that" (suburban, using ability grouping, humanities).

The pace and rigor of curriculum and instruction elicited the greatest number of responses from R group teachers. They are concerned with moving along and having students learn as much as possible. They do not want to "water down" courses for students who are "fired up" about certain classes. The ability to narrow the range of students within a particular group is also perceived as being an advantage of ability grouping.

Different Materials and Methodologies. Aligned with pacing of instruction is the use of different books, materials, resources, and strategies. The ability to choose appropriate materials was frequently mentioned by R group teachers as an advantage of ability grouping. E group teachers also supported the notion that ability grouping enables teachers to pace instruction and simplifies the use of different materials, books, resources, and strategies.

"We do use different books for we basically, in social studies in both grade levels now, use a different book for the low-ability child and the average-and the fast-ability

child work out of the same book, but the book we use for the lower-ability child has much shorter chapters, much simpler comprehension of terms, much more written exercise, and so forth" (suburban, using ability grouping, humanities).

"[Non-ability grouping] will force me to use whole language all the time. I think there is a time and a place for part of that, but I think there's a time and a place for teaching too. As we're developing the new curriculum, I find that we're choosing books in the middle that the low level kids will be able to do and the upper level kids will be able to do and, of course, we're going to have....and these are the extra assignments that we want you to complete for the lower level kids, I mean the upper level kids, so I just don't know. I don't know, but I have some issues that no one's been able to answer yet" (suburban, using ability grouping, humanities).

"An advantage of homogeneous grouping is the types of materials. You can give the whole class one material and be confident that they all can read it" (urban, not using ability grouping, humanities).

R group teachers feel that different materials can be purchased for different classes. E group teachers agree that materials and methodologies can be different for different ability groups. This is perceived to enhance the learning process.

Improving Student Skills, Competition, and Preparation.

Also of concern was improving student skills and preparation. This was frequently mentioned by both R group

and E group teachers as an important issue for ability grouping:

"They need to be challenged, which I think if you had heterogeneous grouping I don't think that they would get the same amount of accelerated material and instruction that they get when they are by themselves....I see the top level kids accelerating. I am able to challenge them more" (urban, using ability grouping, humanities).

"But what seems to be driving so much of the recent literature and discussions in education is this sense of competition with the rest of the world and having to produce skills in our children. They have to achieve certain degrees of academic successes so that tends to be driving a lot of the focus right now" (rural, not using ability grouping, humanities).

Fair competition was a concern raised by R group teachers but not by E group teachers when stating advantages of ability grouping. One R group teacher stated:

"Putting the child who is two or three years below grade level in competition with a child who is accelerated and especially or to the point of recognizing that they are deficient especially in a reading skill" (suburban, using ability grouping, humanities).

R and E group teachers suggest that students can be challenged and their skills improved through fair competition. Ability grouping helps ensure that top level students do not overwhelm lower level students. Thus the

competitive learning process takes place at a more level field of play.

Issues Associated With Mathematics. For math teachers, ability grouping in math instruction was important. Most or all perceived that ability grouping enhanced math instruction. The traditional sequential learning and advanced course offerings seem to perpetuate ability grouping in mathematics. This does not seem to hold true for any other curriculum areas.

"In math, I am still in favor of ability grouping which I guess I was and always have been, so it is just a perception of how it was taught....I just look at them in math I think it would be hard to meet all their needs and to challenge them without ability grouping in the seventh grade level" (suburban, using ability grouping, math/science).

"I am just too old fashioned and I can't stand the way my daughter counts on her fingers and I make her memorize her math facts even though her teachers aren't making her. ...People think of math facts as just memorized but once they have memorized I think they are kind of concrete to you and you have something to base the abstract on. In a lot of math books, it says you learn the abstract and the concrete will come and I think it is opposite" (urban, using ability grouping, math/science).

"I know that I teach students who are not capable of memorizing math facts. There are just some non-mathematical people" (urban, using ability grouping, math/science).

Math instruction was also an issue for this E group language arts teacher:

"...It seems as though ability grouping is based on math scores. If that is so, I have to take their word because they are the math experts. We find it very difficult logistically to figure out how are you going to schedule the kids and then schedule them heterogeneously and then for this one period a day pull them out homogeneously grouped. We are wrestling with that and we have not found a solution" (urban, not using ability grouping, humanities).

Teachers supportive of math ability grouped classes indicate that tradition and the ability to challenge students mathematically are reasons for ability grouping. One teacher suggests that there are just some students who understand math better than others; ability grouping, therefore is appropriate.

Class Size. Of interest to E group teachers was the issue of class size and the number of students within a particular group. R group teachers did not mention this issue.

"When you're dealing with 30 kids, that's the other aspect of this. The larger the class gets the more unruly it is so the easier it is for management purposes to put all the kids of similar ability in the same class. So the other aspect of heterogeneous grouping, I feel, is you gotta have smaller classes. You can't if you're gonna deal with 30, 35, 40 kids in a class then just the management of it forces you toward the only sanity you can eventually muster is to put

them by different abilities. You have to lecture, you have to do a whole, you just have so many fewer options in your method of teaching for a large group" (rural, not using ability grouping, humanities).

"We have in our seventh grade right now heterogeneously grouped classes that are 28,29,30, and I heard it was going to get worse before it gets better because of increased enrollment, budget, the whole bit. I think that is very impossible. Everybody must be saying that. But it is just the actual physical manipulation of space in your room....The room is too small for some things--to have activity centers with 28 to 30 kids walking around and then 8 kids from the resource room is difficult" (suburban, not using ability grouping, humanities).

E group teachers believe class size is important. They perceive that successful instruction can take place in ability grouped classes with larger numbers of students. Eliminating ability grouping may require smaller class size. It is interesting to note that R group teachers did not mention class size. Perhaps this is because they have not thought of alternative grouping arrangements and its impact on the size of classes.

The size of a school budget may impact on class size. Urban areas traditionally have greater diversity and fewer dollars. If ability grouping allows for larger class size this may help explain why many urban and less affluent schools utilize more ability grouping practices. (see Table 3, p. 67)

Teacher Issues

In the fourth general category, teachers talked about ability grouping and its relationship to teachers. Subcategories that emerged were the issues of ease or difficulty of teaching, teacher expectations and professional development, thoughts and personal reasons for their stand on ability grouping, beliefs and attitudes, and teachers' ability to change.

Ease or Difficulty of Teaching. Large numbers of responses centered on the question of whether ability grouping is easier or harder for teachers. There was agreement between R group and E group teachers that ability grouping is easier for teachers:

"I have found that in science that it is a lot easier, and I am also accustomed to it to have more of a homogeneous type grouping. It makes it a lot easier for me to teach the material" (urban, using ability grouping, math/science).

"It's a very unpopular stand with most educators, but I tell you ability grouping, bottom line, makes it easier for the teachers and not necessarily easier for the students" (rural, not using ability grouping, math/science).

"The advantage is it's easy to teach. It's phenomenally easy to teach. You set your sights for a broad area, you teach them the simplest at the level one curriculum, the level two curriculum, and a level three curriculum" (suburban, not using ability grouping, humanities).

"It is a definite advantage--it takes you less time to prepare yourself, it takes less time to prepare material for

the kids, and sometimes it also is easier to manage the discipline better because you have them in you know ability grouping materials that you use and even in the social interaction with the kids it is easier" (urban, not using ability grouping, humanities).

"[Heterogeneous grouping] takes more work. By more work I mean you have to be able to reach a range of abilities. You have to change your questioning strategies. You have to let students become active learners and not just passive listeners. And it's threatening. It can be really threatening. And you have to, when you get ready, make the change to go from homo to heterogeneous. You have to realize you're going to fall on your face a couple of times" (rural, not using ability grouping, math/science).

"I mean, given my preference, I would rather have homogeneous grouping ...because it is easier for me as a reading teacher. I can move them along in the material" (urban, not using ability grouping, humanities).

Both R and E group teachers perceive that teaching ability grouped classes may be easier for them. It takes less time to prepare materials and is more enjoyable. Because of this perception, it seems that changing ability grouping practices would be difficult. Why would teachers choose to make life harder for themselves? Clearly, the benefits and costs, both personal and professional, must outweigh the perceived ease of teaching ability grouped classes.

Personal Reasons and Thoughts. In addition, both R and E group teachers stated highly personal reasons for their support of ability grouping. R group teachers said:

"I have a great deal of confidence in what I'm doing with my ability grouping. I hope, and I certainly believe, that I'm getting as much out of each group as I can" (suburban, using ability grouping, humanities).

"Well, I feel that no matter what you say about schools today there are a lot of real sharp kids out there and the tendency is you I think everyone in education no doubt about the fact everybody loves teaching a group of students who are just, you know, can't get enough from you" (urban, using ability grouping, humanities).

By contrast, E group teachers felt that:

"I have always liked ability grouping....If I had my own kids, I would still want them in a homogeneously grouped class....It has been in existence for so long. I went to school in the 50s and I was ability grouped. I remember going into a 7th grade class I had been taken out of a parochial school, and put into a 7th grade class, and they misplaced me. Boy, did I know I was misplaced. I felt like I lost a year because the kids around me weren't as smart as I was. Then by the time I got to 8th grade, they put me in the right ability grouping. I knew it and I felt good about myself. I knew I was in with kids who were progressing at the same rate as I was....I know with my own kids I had a top group daughter and I had a middle group boy and they worked out fine. I like that. I think it should be a plus

myself. I think that the idea is that you motivate yourself. Then you are motivated by the people around you" (urban, using ability grouping, math/science).

"It's kind of fun to go into areas that you really know. It's kind of fun to have kids in your class who are so outstanding" (suburban, not using ability grouping, humanities).

"...ability grouping was fun in the beginning but the only fun was the top two groups" (urban, not using ability grouping, humanities).

"So the advantage is a real personal high for the teacher--the reward of being able to master something very distant in the text" (suburban, not using ability grouping, humanities).

R group teachers perceive that ability grouping should be retained based on personal reasons or because of the "real sharp kids" out there. E group teachers also believe that working with challenging students can be fun for the teacher. All personal reasons for supporting ability grouping seem to benefit the teacher.

Beliefs About Education. R group teachers frequently mentioned beliefs about education when describing the advantages of ability grouping. One said:

"Maybe just in general I think the teachers at the middle school level are really concerned about the child first and the curriculum and the leveling is secondary. It's important for the child to be comfortable, of good self-esteem; and we need to put those kids in an area where they

can succeed and be comfortable. Call it leveling, call it grouping, call it whatever you want or no grouping. The important issue is the child" (suburban, using ability grouping, math/science).

Few E group teachers stated beliefs about education when discussing the advantages for teachers of ability grouping. However, one teacher said:

"...the bottom line's gotta be what's best for the kids. And I guess what bothers me is sometimes I think decisions are made for teachers instead of the kids. And I know it involves more work sometimes and it may involve making more individualized plans and plans for groups. I know, in some ways, it's demanding more and I think that many times teachers feel as though more and more is demanded of them every day" (rural, not using ability grouping, humanities).

Both R and E group teachers' beliefs supporting ability grouping are concerned with the child. This may form a basis for agreement and a foundation for change for those who want to alter ability grouping practices.

Teacher Change. R group teachers frequently raised notions of tradition, resistance to change, and years in education:

"I really don't know because I was brought up with the attitude that I, in essence, am the teacher I then am the most important person in that room; so it's like I want to get as much learning going as possible so I want to always be the puppeteer and I don't want to have to have the whole

class spending hour after hour doing activities that 70% of the class can do in 20 minutes. I don't know how that would happen....But academically I hope I'm getting all that I can out of these students, and again, until the other system can prove that I can do a better job, then I'm not in favor of it at this point....I've never taught in a school classroom where there hasn't been ability grouping" (suburban, using ability grouping, humanities).

"...I am in ability grouping now and I like it. If I was forced to go into a heterogeneously grouped class I think that I would manage; but I like what I am in now. So I am not. Nothing is going to change my mind unless they hit me over the head and come up with something. You see, you're wrong. We are not the new generation of teachers coming out. We are the old generation where content is important, and I think self-esteem has always been important as far as that goes. But the new kid coming out is more, has seen more, has done more. I mean, we are from the old school; and it is difficult for us to change, especially when you have been taught that way and you have been teaching that way for so many years" (urban, using ability grouping, math/science).

"I've read all the data too, and I've read all the data that it says that the children who come from the different cultures and socioeconomic backgrounds and everything that it's not good for these kids to be all placed in one group. I do philosophically understand this argument, and I think that it is a problem. But I, to be brutally honest, I just wish that they would leave the English department alone when

it came to heterogeneous grouping because what works, works. It's working right now and why take something that's working and break it. It's forcing us to do things that none of us want to do or that most of us don't want to do....I'm gonna lose some of those things that I have taught with a class and I find that upsetting" (suburban, using ability grouping, humanities).

"We have done it for so long, to be honest with you, and we haven't tried anything else and people don't like to change and when they are forced to change there is always a conflict" (urban, using ability grouping, humanities).

E group teachers also responded frequently to the notion of tradition, resistance to change, and years in education in relationship to ability grouping. They stated:

"The only advantage I can see with grouping at all levels, if the teacher isn't willing to teach in a way that is, how do I want to say, that will have a positive effect on all kids" (rural, not using ability grouping, humanities).

"...It's hard to drop it, because it's a habit" (rural, not using ability grouping, humanities).

"If you take a teacher that's been teaching English for 24 years and had four levels and ask them to eliminate that, it would be very difficult for them to do so....Change is very difficult, particularly for experienced staff" (suburban, not using ability grouping, humanities).

"I think ability grouping has been the traditional way for organization--it is very easy" (urban, not using ability grouping, humanities).

R group teachers find old ways of teaching hard to change. They find it difficult to change what they like or what works for them. They also suggest that teachers' personal experiences with ability grouping shape their thoughts. These experiences may also help them move from theory to practice if ability grouping practices are to change. E group teachers support this notion of change and suggest that change in teacher behaviors in classrooms is necessary.

Both R group and E group teachers mentioned the failure of past innovations in education:

"I just feel that education is a cycle that repeats itself over and over" (urban, using ability grouping, humanities).

"In my 18 years at this school system we've had different approaches offered to us on discipline or teaching methodology. It seems that whether that's brought in by the principal or superintendent it lasts just for the reign of that personality; and if this is another system like that to me, it'd be more negative than positive at this point" (suburban, using ability grouping, humanities).

"I've also been through 16 or 17 years of trends. This is the trend that's going on now. We've been through Madeline Hunter. We've been through every trend that's come down in education, and I hope that this trend of

heterogeneous grouping and some of the other trends out there, even the whole language in the English department around the country, don't get to be just that--a trend--and then they're going to say "Wait a minute" like they've done other times. This is wrong. It's not working. We need to go back and reevaluate and I'm afraid it's going to....I've written a fine curriculum which meets the needs of the kids and I hate to lose that" (suburban, using ability grouping, humanities).

Teachers' thoughts about ability grouping are somewhat influenced by the failure of past innovations in education. It seems that too many times changes have come and gone and it is the teachers who have worked hard only to find that what they were striving for is unattainable or a new development has occurred. Teachers wonder why they should support an initiative to eliminate ability grouping. This attitude may make change more difficult to achieve.

Summary. In summation, then, teacher comments about the advantages of ability grouping centered on (1) the ability to cover more material, (2) the potential to challenge and enrich students, and (3) its effects on students' self-concept. These advantages coincided with the perception that a teacher could better pace instruction when using ability grouping. Teachers also mentioned that it was easier to use different materials with homogeneous grouping. Teaching is perceived as easier when ability grouping is used. Teachers also believe that the influence of tradition and resistance to change perpetuates ability grouping in the schools.

Lastly, teachers are aware of the role of parents and their perceived support for ability grouping.

Advantages, as perceived by the R group and the E group, seemed to cut across type of school and were represented in each category of response. No trends among urban, rural, or suburban schools were identified.

Perceived Disadvantages of Ability Grouping

Four categories were identified when data about disadvantages were reviewed: students, parents, curriculum and instruction, and teachers. As one might suppose, the E group perceived far more disadvantages to ability grouping than did R group teachers. Interestingly, the R group noted more disadvantages of ability grouping than advantages.

Both R and E group teachers commented more frequently about certain issues relating to students when citing disadvantages of ability grouping than they did when citing advantages of ability grouping. These subcategories were: (1) the relationship of ability grouping to students' self-concept, (2) the power of student modeling and interaction with peers, (3) enhanced opportunities for learning and setting high standards, and (4) positive aspects of diversity and the need for schools to reflect the "real" world. With the exceptions noted, the results from teachers are predictable.

As teachers discussed the disadvantages of ability grouping, they naturally talked about the advantages of a non-ability grouped class. For the purpose of this study, these advantages of non-ability grouped classes are considered disadvantages of ability grouping.

Student Issues

As was the case in the identification of advantages, subcategories emerged within the student category. They are: student self-concept, increased student learning, problems with low groups, discipline, students working together, placement, and diversity.

Student Self-Concept. The most skewed subcategory was students' self-concept. Two R group participants stated that low student self-concept was a disadvantage of ability grouping while twelve E group teachers addressed this concern. Their comments include:

"The biggest disadvantage to ability grouping would probably center on the area of self-concept....if they have been ability grouped through the grade levels they kind of label themselves" (suburban, using ability grouping, humanities).

"I kind of talked about the idea of the students' self-esteem suffering where one student would say to another you know, 'Hey, I'm a one and you're a four.' Or some student coming in and saying, 'Gee, I'm only a three and I'll always be a three,' and they've labeled themselves instead of looking at what their potential is. They tag themselves and

they feel that they'll be a three forever and ever"
(suburban, using ability grouping, math/science).

"It's the comfort of the child. It's the child seeing the real world as it is. To try to dispel some of that competition that's eating away at some of our kids"
(suburban, using ability grouping, math/science).

"I think that peer pressure and what your peers think of you is so important. I really think [ability grouping is] terribly damaging. And I don't think you can undo that. Once you've done it, I just don't think you undo it" (rural, not using ability grouping, humanities).

"I think it gives a lot of kids a distorted perception of reality. And I think it stifles some kids. I think it makes other kids feel as though they're better than other people....I think you lose a lot of potential from kids that we could be tapping....I think, especially seventh graders, this is such a pivotal year when kids are going to start their patterns for life and they don't have as much value or self-worth" (rural, not using ability grouping, humanities).

"I think [heterogeneous grouping] gives kids a better sense of self-esteem. It makes children more aware of, and hopefully tolerate, differences in other people" (rural, not using ability grouping, math/science).

Both R and E group teachers agree that ability grouping may have long-term negative effects on students' self-concept. They believe that educators should reduce negative competition by utilizing non-ability grouping practices. Both R and E group teachers believe that developing

students' self-esteem will increase their chances for their success in school.

Increase Student Learning. Increased student learning is the only subcategory in which teachers from both R and E groups cite disadvantages of ability grouping. The perception that students could learn to high levels in non-ability grouped classes (or conversely that students learn less when ability grouped) was frequently noted by both R and E groups.

"A disadvantage, of course, would be [for] that kid that has the ability to use his hands or attain that information in a different way" (rural, not using ability grouping, math/science).

"Even though I do teach level classes...I try not to talk to my students in terms of this is my bottom class or this is my level three class but in terms of promoting their ability and getting them to work to the best of their ability. One of my goals is to make sure as many of these kids can move up as possible, to give as many of these kids a chance to improve upon the level that they were put into ...I'm more than surprised that a lot of the kids will meet that challenge if given the opportunity and that's the key. They have to be given the opportunity. You're not sure if you can do algebra or pre-algebra unless you try. But if you are put into a general math class your classes have to wait another year to get those prerequisites that I was talking about that are essential to be successful" (suburban, using ability grouping, math/science).

"Students at the lower end of the spectrum, a lot of lows, end up being discipline problems and people have a harder time teaching in those classrooms and those seem to sometimes be where we are looking at in education. How can we improve student performance? So maybe we look more at the lower end of the spectrum and we aren't meeting the needs of these students and we are sending too many students out into society that aren't functioning well" (suburban, using ability grouping, math/science).

"Because the die is not cast, it shouldn't be cast at that point. The kids just might discover they just might actually be brighter than they really [think they] are" (suburban, not using ability grouping, humanities).

"What happens to the late bloomer if you track too early? You're stuck! ...Once you're pigeonholed you're pigeonholed and kids know it" (rural, not using ability grouping, humanities).

"I saw last year when I had some students stay after and one was a top level class and one was in a pretty low level class and the student in the low level class got something right away and was helping the top level student and what that did to that student's self-esteem! There's nothing that I could have done in the classroom that did that. He got it and was walking around like a peacock and I think that's the type of thing that could happen in those situations" (suburban, using ability grouping, math/science).

"Well, I guess one measure, in terms of the grading, would be the work that's produced. The students are meeting goals that I'm setting for them, in terms of what they're accomplishing" (rural, not using ability grouping, humanities).

"But I have to say that no matter what, I do believe that any teacher should try to gear their program to be successful with kids--any kid. I think kids all have to realize that they can learn. And they can learn anything! They really are motivated to do it" (rural, not using ability grouping, humanities).

Both R and E group teachers seem to agree that increased student learning can happen when ability grouping is not used. They also agree it may be difficult to move students to a different group when it may be appropriate to do so. R group teachers cited poor teaching, resulting in poor learning, when discipline problems occur in lower groups. E group teachers are concerned about students' preconceived expectations of themselves and teachers' preconceived expectations for both the high and low groups.

Some teachers also believe that ability grouping is not good for top, middle, and lower students. Typical teacher responses from the R group were as follows:

"...They do get mentally trapped in their own minds ...after a number of years. I would suppose I see it beginning at this age. They, in a sense, throw up their hands, 'I'm never going to be smart! I'm never going to compete with the top kids!' and that's gotta be discouraging

to a student. The faster students ...I get angrier at the faster students when in a sense they rest on their laurels. ...That's discouraging that they're not going to get this lesson in life, so to speak. They have to share this world with all types of people and they can't all be like ourselves. We at least have to have an appreciation for that" (suburban, using ability grouping, humanities).

"So in this mainstreaming class, we have the students who don't know who is who. So all that terminology is gone. We have found in this class that we build tremendous self esteem. The students are highly motivated. We have parental involvement that is phenomenal; and, as a matter of fact, I just found out that because we are entering our third year with the program that we are now getting requests from parents of sixth grade students to come in. That could be a carry over to the mainstreaming where you get a lot of this social stigma that goes with this ability grouping" (urban, using ability grouping, math/science).

"Our kids in the top groups sometimes burn out before they get to their senior year in high school" (suburban, using ability grouping, math/science).

E group teachers stated:

"Well educationally, I think all students benefit from a diverse group. I think that a teacher tends to teach to the highest level so the youngsters who might be grouped lower are now exposed to things they wouldn't otherwise have been exposed to. Socially, we live in a diversified world. It's time we learned to deal with that. And I don't think in

the middle school we need to create an elitist situation. I'm sure I've left something out. Basically, that's probably it" (rural, not using ability grouping, humanities).

"If nobody put Mozart near the piano when he was four, he wouldn't have played the piano, I mean you've got to give these kids the opportunity to fail as well as the opportunity to succeed instead of just automatically assuming it. And I hate the gloomy look on kids' faces when he or she thinks that automatically because they're on a certain level they won't do it, can't do it because we're in level three. I've heard that in English and French, we can't do that [because] we're in level three. They can. So I think self-esteem, when they get into real life and they find out yes there are levels in real life. There's favoritism. There's always something that goes on in your life. They don't need to learn that kind of thing until college" (suburban, not using ability grouping, humanities).

"Kids are happier [in a non-ability grouped class] and the grades are a lot higher. Even the kids that are coming in from the Resource Room and have no skills whatsoever do not feel--they did the first time they walked into my room but they don't feel intimidated any longer....It is a different atmosphere in here and they are happy and they want to come in" (suburban, not using ability grouping, humanities).

"The advantages of [heterogeneous grouping] are - I don't have a class that I don't like going to anymore. ...now they are all pleasant....I always get homework and if

you are a student who has never done homework, and I still have some of them but not much, they don't consider it normal whereas last year in some classes it was normal....The standards remain high" (urban, not using ability grouping, math/science).

"But I do think the majority are better in heterogeneous settings because those kids that are really focused and on task will bring up the majority of the kids and I think the others--I say learn" (urban, not using ability grouping, humanities).

"It does give you an opportunity to hit every level. It doesn't mean that you can't challenge those kids that are at the top. You can. And that, in turn, is going to help inspire the kids who are not at the top and who are really trying to learn how to think" (rural, not using ability grouping, humanities).

There is agreement between R and E group teachers; each group, however, has strong opinions. R group teachers perceive that homogeneous grouping helps build self-esteem, but that low group students tend to give up and top group students tend to "burn out" later in high school. An R group teacher indicated that access to learning environments, such as computers may also be limited for low ability grouped classes.

"Pushing for exposing every level to all the materials, all the technology, I'm thinking of the computer age at this point. There should be absolutely no reason in the world why low ability students do not have access to all the computer

stuff that we use for anybody else....I believe that the high-ability students get more access to whatever ...low-ability grouping becomes a dumping ground where we just pacify them for the 50 minutes" (suburban, using ability grouping, humanities).

E group teachers generally believe that all students gain in non-ability grouped classes. Lower level students seem happier and elitism from top level groups is reduced. They also seem to believe that teacher and student expectations remain high, that all levels are exposed to each other, and that this interaction is extremely positive.

Problems for Low Groups. When stating disadvantages of ability grouping, many teachers discussed the learning of low students or their level of frustration. Some comments from both R and E teachers included:

"We have become very aware of in this class that [what] we have is the fact that there has been a stigma associated with the kids in the low group" (urban, using ability grouping, math/science).

"We had some kids who weren't programmed for foreign language. (They weren't recommended because of their reading level) So they took it, and they bombed out; but we had about 12 kids who did very well, including some special ed kids and will go on next year. So for these 12 kids, this idea of the absence of tracking helped" (urban, using ability grouping, humanities).

"I take a kid that has that ability, he's let's say let's put him in a low ability group and I'll do a hands-on

process oriented thing--take a microscope apart rather than just use a microscope. He'll do that. But that's an ability that could mean high ability group but somehow he's in a low ability group because he can't read. So does ability grouping work that way? I'm not sure" (rural, not using ability grouping, math/science).

"The kids end up labeling themselves as failures and seeing themselves as low groups" (suburban, using ability grouping, humanities).

"I think students at the bottom ...know who's at the bottom and if you've been in remedial whatever all through elementary school you can pretty much ...you know a lot of those kids check out pretty early and say well what's the point" (suburban, using ability grouping, math/science).

"This particular low group that we had that was so difficult we couldn't accomplish anything" (urban, not using ability grouping, humanities).

"I see the disadvantage of ability grouping to be that if the lower ability groups are people who have problems with the work and have an attitude that is not conducive to learning [and you] put all those people together, their perspective is that. That is the way everyone is. While if you mix it up [and] they would have something else to compare to, then I have found, most of the time, and it may not necessarily be the grades but I found that those people will at least try to attain a higher level and they do notice what is going on around them. And, I have found that

when there is more material covered that they learn more"
(suburban, using ability grouping, humanities).

"...Because I think people are starting to recognize that kids are changing and that we need to meet their needs in a different way. I think maybe some people are finally opening their eyes, or maybe already had but are becoming verbal about it....We can't keep these kids in the lower level down where they are and have them feel the way that they do because if you don't firstly have a sense of community where the kid feels they belong, if you don't work on their self-esteem, then you have not set the pattern for learning. They have to feel comfortable. They have to feel somewhat good about themselves before they will extend themselves and write for you, talk about their reading for you and I just think people are realizing that quite possibly we've kept these lower kids down too long and there must be a better way" (suburban, using ability grouping, humanities).

"I don't think so. I just think it's so undemocratic. It really is....I think this is wrong to put kids in low achievement. I mean if I were a kid, I'd feel lousy. Nobody likes to get bad grades. Nobody likes to be in that, because my daughter used to cry. When she was in middle school, she called it the retard group. She got it in math class and she said, 'I know I don't belong in this class, Mom, because the kids are calling it the retard group.' ...I almost dropped dead but that was [her] comment. I hated that. She said 'this is bad, I don't belong with these kids.' Well why,

isn't that awful? And that she started to feel so badly about herself. And we saw her really go down the hill from that" (rural, not using ability grouping, humanities).

R and E group teachers perceive that ability grouping may not be beneficial for low group students. R group teachers perceive that expectations for learning are very low and that students may develop a stigma and/or label when assigned to these low groups.

E group teachers are strong in their beliefs that ability grouping provides little motivation for students. As a result, low students tend to give up. They also state that discipline in low classes is often detrimental to student learning. They perceive that ability grouping is oftentimes self-defeating for the students themselves, and for learning. They conclude that there probably is a better way to organize for instruction.

Closely aligned with problems facing low groups is the pressure of elitism, the feeling of superiority among high group students, and the labeling of students by their peers and teachers. E group teachers were more concerned with this issue than their R group companions.

"I think it's a societal thing that the kids that are slower get that label. Unfortunately, they carry that label with them in the lower ability group. You got a thing that as a teaching staff you've gotta make that change" (rural, not using ability grouping, math/science).

"Homogeneous grouping creates an elitist kind of group. And, on the other hand, it creates a group of kids that feel

that they have very low self-esteem, and they know where they stand. You're not kidding anybody by trying to tell them that they're not any less intelligent and certainly aren't as good, because they don't buy that. They're smart enough to know that. And I also feel that one of the major disadvantages is that some kids are talented in certain areas and not in others, and you can never tap the potential that they have if they always feel that they're in the "stupid class" (rural, not using ability grouping, humanities).

"It's become a real status thing for kids. You know, they want to be accelerated because it makes them look smart" (rural, not using ability grouping, humanities).

"I think the way the teachers stereotype kids sometimes ...and the way the parents stereotype kids. I think it just puts kids in, in a box, [and] it's hard to get out" (rural, not using ability grouping, humanities).

"Within homogeneous groups, I think that they're just going to not be able to see beyond what they have. Kids can spark each other. I can't imagine being with the same kids year after year after year--the same group and knowing who the dummies are and knowing who the smart kids are. That would drive me crazy. I'd hate to be a kid in that situation. And I think, unfortunately, most teachers probably have not been trapped into a lower trap so they just don't understand what it's like for those kids. They're human beings and nobody deserves that" (rural, not using ability grouping, humanities).

"The kids have an attitude. They know 'I'm top, you're middle, you're bottom'; and that attitude sometimes carries and follows these kids right into adulthood. That's wrong. So the kid is a low level, has that feeling 'I'm dumb, I can't do it, what I'm thinking about that poem is not right'; and it's just that they would interpret it differently than that high level kid in a more simple way but it doesn't mean they're wrong. But they don't have the vocabulary behind them like the higher level kid does" (suburban, using ability grouping, humanities).

"I think that ability grouping is a segregation. You are segregating the kids, you are putting signs on their foreheads, you are telling the kids, 'OK here you are, you are the slow learners,' and that affects the kids' self-esteem" (urban, not using ability grouping, humanities).

R and E group teachers believe that ability grouping may encourage ineffective and destructive labeling of students. It may also be perceived to create elitism and inflated self-concept for more able students. E group teachers believe strongly that ability grouping probably limits potential and opportunity for students to increase their learning.

Discipline Issues. Of equal interest was the issue of student discipline. E group teachers addressed this concern through their statements:

"You can list 125 kids from 1 to 125 and, therefore, cut at six intervals. Well your problems are on the bottom-- not all of them but most of them. One of the big

disadvantages is that you have a class that's a major headache" (rural, not using ability grouping, humanities).

"You go into the lower level classes and you start seeing more behavior problems, and I'm not convinced that the reason that the kids are there is because they're necessarily behavior problems. I think a lot of the problems come out while they're there. I think a lot of the kids that feel like they're stupid--you know, if I'm in a class I'm already convinced I'm dumb....Maybe after a while, I'll start acting and saying, 'Well, if I don't try and I fail, then it's not that big a deal and maybe I can be a clown, maybe I can be whatever.' I think that a lot of those behaviors are reinforced by grouping and not only that the kids that do act out, they don't get a chance to see appropriate role models of their peers because sometimes they're not even in their class....They don't have the role models in the class to say, 'Wow, I really like what [he's] doing, what [she's] doing. Gee, I could emulate them.' So, I see a lot of disadvantages" (suburban, using ability grouping, math/science).

"The discipline is easier [in a non-ability grouped class]. You set yourself up for the discipline because when you go into the classroom you know it's a level two so you say, 'I'm going to have a little bit of trouble, I will have trouble,' and I've done that for years. Just automatically assume that your level three class whether it's English or French, will get into trouble and they do. The assumption

always comes true" (suburban, not using ability grouping, humanities).

"We did not group by ability because the first few years that I was in there, we did it, but didn't feel that it was successful. We didn't feel that it accomplished its goal with the students....People that have lower ability have it for one reason or another and one of the reasons is that they have not learned how to study, how to sit still, how to socialize at appropriate times, and so forth. And when you put a lot of people in the same room with that, it magnifies the problem enormously....The group that has the biggest problem is the group that doesn't know how to socialize appropriately or how to study appropriately or what you do when a bell rings or anything. It isn't that they can't do math. And when we concentrate them all in one class, that class is a difficult class to work with" (suburban, using ability grouping, math/science).

"The kids did not like themselves in those low groups. ...I didn't have paper airplanes flying or anything but they were just not happy. Every day it was a struggle. Attendance rate is better now [that the class is heterogeneous]. Maybe I am wrong, but it seems like those problem children are here a little more frequently but they blend in a little bit better" (suburban, not using ability grouping, humanities).

E group teachers seem to believe that discipline problems are exacerbated by using ability grouping. By putting many frustrated low-level learners together, students may lose motivation and discipline problems may

develop. Teachers also perceive that because few positive role models are present, students might think misbehavior is normal. Some teachers perceive that many students in low-level classes have not learned social skills. This, combined with lower expectations from teachers, may not be conducive to student learning. E group teachers seem to believe that when non-ability grouped classes are utilized, negative behaviors "blend in" and are far less problematic.

Students Working Together. Students not having the opportunity to work together or serve as role models for each other was frequently cited as a disadvantage of ability grouping by both R and E group teachers. R group teachers said:

"They see, in essence, how the other half of the world lives or how other students who might have more difficulty have to really struggle sometimes, and the faster student might get an appreciation of, in a sense, their special gifts and how they should use them and not be lazy about using them. Some of the faster track kids just take it for granted that education is going to be easy, but someday there's going to be a struggle somewhere along the line. If they saw that spectrum from the lower ability kids, they're not just the disruptive students that they're students that legitimately have problems in comprehending that would give them an appreciation. The other side of the coin, the average students, the low ability students, they would get an appreciation of what excitement education can bring to them, what they can learn instead of just going through the

process of coming to school every day, that education can be exciting and you can learn about the great world out there. The enthusiasm, I think, that would rub off a little bit. I would think that--that would be the major advantage as far as everybody having more of a common understanding of maybe sharing and helping somewhere along the line" (suburban, using ability grouping, humanities).

"I just read recently a report, and I think it might have been out of the Middle School Journal, where a group of students. One who was extremely low in skills was working with a student who was extremely high, had very good skills, and that they worked with each other on a report--together on a report but they each had to do one but they worked together. The young boy who had extremely low skills ended up with a B+ and the boy who had the very high skills received only an A- and it was a discussion on what the boy thought of himself after that. I thought that was really pretty poignant" (suburban, using ability grouping, humanities).

"It would give the students at all levels an opportunity to do what we consider to be accelerated--the opportunity for a middle grouped child to do some of ...the upper level thinking skills of which all children should get....The challenge of putting the middle grouped child in with the someone in a higher group might also be a stimulus and a motivation for them to learn. What the children can learn from each other, I think is a real factor" (rural, not using ability grouping, humanities).

"I think it's been my experience that it'll work as long as there's a competitive edge. It won't work if there's a bunch of individuals trying to do better. There's no team playing. There's a better team play when the groups are mixed....I also think that, in general, people like working with [other] people, and I think that has a great appeal in that society from a child's standpoint" (rural, not using ability grouping, math/science).

Six R group teachers recognize the advantage of students working together. They believe that modeling of learning strategies and behavior is successful and that students develop an appreciation of different ways of learning that cut across all learning levels. R group teachers seem to be saying that students working together is developmentally natural for young adolescents and, therefore, should be utilized to increase learning.

Regarding modeling and interaction with peers, E group teachers stated:

"I see the disadvantage of ability grouping to be that if the lower ability groups are people who have problems with the work and have an attitude that is not conducive to learning and you put all those people together, their perspective is that, that is the way everyone is" (suburban, using ability grouping, humanities).

"You would want the higher level to reach out to the lower level, the middle to reach out and that they would all help one another" (suburban, using ability grouping, humanities).

"I do not think they have a good set of role models in the classroom. A few of them do work well, but don't have much math ability. More of them don't work hard enough to gain their math ability. Whether they could or not, they don't. And if you have a concentration of that kind of a problem, you don't meet your goals with those students" (suburban, using ability grouping, math/science).

"[In heterogeneous grouping] I think they learn from each other. The work habits of working together are effective. Just the work that they see somebody else do can spark them....The low groups feed off of each other and can become very difficult behavior-wise. I find those groups, especially in heterogeneous groups, really work well....I think there is more to be gained. I think that the top students can be enriched in the context of the regular class and have more to learn as far as the future goes, related to different people different than themselves. In middle school, I think that it is the last shot they get to relate to people that are different from themselves, and for everybody else they are going to have the advantage of higher expectations" (urban, not using ability grouping, humanities).

"I do groups sometimes and very often I'll have kids work with each other. I've really changed my practice of trying to feed kids information and have them spit it back to me on a one, like on an individual basis. I really have kids rely on each other a lot more because the important

thing is that they're learning" (rural, not using ability grouping, humanities).

"There is nobody to model, other than the teacher, which at this age level, you know, you have two strikes against you already. So to get them to read, if you are a Reading or English teacher with 15 who don't like to read, it is really tough. Whereas if some cool, smart kid is reading a good book you have a model there....To stick 25 kids together all day long is absurd. It is not human nature to stay with the same people all day like that. I find each group would get a personality and it's real hard, one against 25, to change that personality especially when they are all low or low average" (suburban, not using ability grouping, humanities).

E group teachers agree with many points about student interaction raised by R group teachers. They believe that student interaction seem to help all students develop positive attitudes and appreciate individual qualities. Students would probably share work habits and learn from each other through modeling.

Accuracy Of Student Placement. Both R and E group teachers had concerns about placements, tests, and the identification of student differences for grouping purposes.

"I do think that in every class that you have, even though everybody is put in levels, you still are teaching to a heterogeneously grouped class" (urban, using ability grouping, math/science).

"I think some students are placed because they have elected not to do the work instead of their true ability to do the work. I don't know what you could use for a test to be able to put them in but you get some students placed in lower tracks who truly are not low-track ability students. ...I think that is the one disadvantage that sometimes you end up with a few discipline problems and not truly students who are struggling academically in the subject area....Some students are put in there specifically because they don't do homework and they got low grades. Because of that, they do have the ability to perform in a middle class and they can finish the work in ten minutes where somebody else who is truly a lower student takes a half hour to get the work done" (suburban, using ability grouping, math/science).

"Well, to some degree, sometimes you move a certain type student from a lower group into a higher group where all his records indicate maybe he/she should not be at that level but because of the success around them it seems to rub off and it does help. It helps that student that they can sometimes achieve above and beyond what you thought they were capable of. I have seen some cases like that....I wonder, at times, sometimes maybe a kid gets stuck in a 3 or a 4 group and we haven't given him an opportunity to get out" (urban, using ability grouping, humanities).

"I find sometimes in the high ability group I don't think that they belong there. They are nice kids and that projected image helps them to be selected for those groups sometimes....I found times that there are people placed in a

class level that do not have the ability to meet that class so on paper it is a homogeneous group, but it is really not. ...I have found a misplaced kid who may be lower but got in a group but have done far beyond what I thought they might do--like answering things in class. I have had unexpected things that have been very positive, so I knew they were understanding the concepts" (suburban, using ability grouping, humanities).

"The result of ability grouping in one or two subjects is that de facto the other subjects are also ability grouped" (suburban, using ability grouping, math/science).

"What I like about mixed grouping is that it forces me to look at them as individuals, because I feel that there is always a mixture. No matter how [well] planned it is, there is always a mixture of abilities" (suburban, using ability grouping, humanities).

"I will have to say that as a bilingual teacher I am very worried about the way that kids are grouped because of language. This is killing the kids and killing the school, and it is killing the educational concept that we have because I feel that is segregation. I really feel that because it is not helping; and I'm not talking about a bilingual Puerto Rican because bilingual is Chinese or everybody it is like segregation. Taking a kid and saying, 'Where do you come from? Are you Puerto Rican? Go there. Are you Chinese? Go there.' It really worries me" (urban, not using ability grouping, humanities).

"I've got a daughter who is a freshman at [a nearby college] who still is upset that in the third grade she was not picked for the talented and gifted program. She is extremely creative and she felt that she was not given a chance. All these years later she is still upset" (urban, not using ability grouping, humanities).

R group teachers perceive that students seem to become "quagmired" in their ability grouped classes. In addition, some perceive that even with accurate placement, ability classes are still very diverse.

E group teachers believe that language ability is often used to determine ability groups. This may result in non-native speakers of English being placed in low groups. Teachers also perceive that ability grouping for any one subject probably determines groups for others. Additionally, non-ability grouped classes might force teachers to look at individuals and not at groups. E group teachers cite examples of students who were misplaced yet performed successfully, as evidence that ability grouping does not always work.

Both R and E group teachers believe that placement is not accurate and often "nice" kids or kids who show extreme effort are placed into high levels. By implication, the reverse would also be true.

Diversity. Both R and E group participants raised the issues of cultural diversity, discrimination and schools not reflecting the real world. The E group held three times more perceptions regarding the issue of diversity. Perhaps this

was because R group teachers tend to view ability grouping as an academic issue, while E group teachers are more concerned about the whole child.

R group teachers identified the following as potential problems with ability grouping:

"Maybe other students might develop an attitude of superiority. Learn to accept or communicate with other students who are below their ability. They might not have the chance to help someone or to work with someone, and I think they could go out into society where they are going to be with individuals of all abilities and they might not know how to handle working with someone who doesn't understand or being patient and kind or helpful....Students are individuals with different personalities" (urban, using ability grouping, humanities).

"Well, you are getting such diversity now in your children. Your cultural mix now especially in this city. It is something that we have seen within the last three years-- a great increase in that. And, you are running into a lot of language problems, cultural adaptive problems where simply you are teaching procedure can, in some cases, be culturally offensive to one person. Having a mix in that aspect, I think, is very good....I find that in the classroom is where I have more children with cultural diversity that (I prefer not to use the term minorities) and that have more sharing of information. I hear things like where I am from, you know, and that has led into discussions and pursuits and what not. When you don't have that....they are stricter in

their flexibility of expression" (urban, using ability grouping, math/science).

"When you do have kids grouped according to ability, the top group rarely sees the bottom group and the bottom group, in turn, rarely sees the top, so they don't get a real true role model [of each other and] what the real world is all about. The top group kids don't understand that some students have trouble doing basic computation. Some people have trouble just conceptualizing. So they get a real, they get a distorted image, I think, of what the real world is out there and going down to the four group. The four group obviously gets another distorted view--that the view of everything is a little slower, it's a little more tedious, and again that's a distorted view of the real world. I talked about role models" (suburban, using ability grouping, math/science).

Comments from E group teachers included:

"That group of students that's segmented off and does their own thing; they're not exposed to people of all abilities, don't develop a sense of how to work with people of all abilities, don't develop any sense of appreciation for students who learn in different manners. Whether they're as smart or just learning styles, they just don't develop any sense of patience or understanding or cooperation or group work or anything. But when you mix them up, you develop exposure for the youngsters that aren't as strong, but I think you also have all students realizing that people are better in some things than they are in others. And even

the smartest kids may not come up with the solution to the problem because they did it the wrong way and somebody else with a different learning style has something to contribute. And so there's an appreciation" (rural, not using ability grouping, humanities).

"I guess my biggest fear is for kids who are at the top and always feel that they're better than other kids. I just think it creates an unfair situation socially. It's also not realistic. Because when kids face the work world, when they face college, when they face any situation socially, they're never, ever going to be in a homogeneous situation" (rural, not using ability grouping, humanities).

"Because society is not ability grouping... And I think its just is not the way things are in the real world. And I think students need to learn to work with everybody. Business wants people prepared to come out and be able to work with everybody. I think sheltering kids from other kinds of competition is wrong. And I just think it doesn't prepare kids for the real world. And I think everybody has something that they excel in, and I think this gives them the chance" (rural, not using ability grouping, humanities).

"I worked at [a large insurance company] for three years and when you get out there, you work with lots of kinds of people and if you aren't a team player, you just don't make it. You could have a boss that you hate, that's tyrannical. The bottom line is that they're producing, they're going to stay in power. And that's why you have to learn to work with a lot of different kinds of people. And

there may be somebody who you don't really think, intelligence wise, deserves a job, but that doesn't make any difference. And if you can't be a team player, you'll have serious problems....That's what business seems to say. They want workers who can be part of the team and that seems to be the whole thing. Teaching students to work only for their own grade is wrong" (rural, not using ability grouping, humanities).

"Another reason, too, in the real world is when these kids have to go out in the work force, my job where I work, we're not grouped by ability. You go to the mall and you look at all the people that work in the mall, they aren't grouped by ability. You go into a factory where you may have engineers, you may have supervisors, and you may have workers, your engineers need to be able to communicate with your factory workers because if there's no communication, then they can't learn to work together, then there's not going to be a product" (rural, not using ability grouping, math/science).

"...I think because finally people that have been tracked middle and low level are realizing that they are being discriminated against, especially when they go out into the work force in real life. Going in for college acceptance, you don't get as many credits, I guess; or for lower track, looking, filling out a job application where you have to write down or send transcripts--maybe because a kid took a fundamentals of math and didn't take algebra I.

That's the type of discrimination that I'm talking about" (rural, not using ability grouping, math/science).

"Society is a mixture, and I like having the classes be mixed" (suburban, using ability grouping, humanities).

"...Students that would benefit the most from being with all types of learning styles, all types of, in terms of success stories, failure stories, experiences of the students on the top and on the bottom. I think the middle students do OK; but I think, from what I've seen in science and geography, students who normally would have either not been challenged either way, positively or negatively have really blossomed and I think they would. Life is not about, for the most part, this elite group at the top. Then there's this middle group, then the dumb ones on the bottom, I mean life is about learning about how to work with lots of different people. I think that would give them a lot of experience, especially in middle school, to see that student, that straight 'A' student, isn't really confident, has a lot of the same problems, doesn't understand something that they get" (suburban, using ability grouping, math/science).

R group teachers believe that ability grouping does not seem to allow individuals to understand each other. They believe that students differ in many ways and that ability grouping often separates students unnecessarily. Of particular concern is the tendency for ability grouping to separate along cultural or socioeconomic lines.

E group teachers state similar thoughts. They feel strongly that ability grouping probably discriminates based on numerous criteria. All students have problems learning, therefore, there is no great need for ability grouping. Businesses also want individuals who can be team players and work together. Taken as a whole, both R and E group teachers believe that non-ability grouped classes more accurately reflect society and that teaching students how to work together is beneficial for all.

No trends were evident in teacher responses in the category of students when analyzed by type of school. This would seem to indicate that these issues are not unique to a particular setting.

This is particularly interesting, as urban educators are generally more concerned about these issues. A conclusion seems to be that urban educators believe that non-ability grouped classrooms can work well in their schools. If they can "make it happen there", certainly suburban and rural schools can utilize non-ability grouped classes productively.

Parental Issues and the Public's Role

Parent issues were also identified regarding the disadvantages of ability grouping. There were almost equal responses from both R and E group teachers as typified by these examples:

"Lots of times, the parent will put the child in that top group even though the child is not ready and they get

frustrated, I've got one student right now who told their parent last year that they didn't want to be in the top group and she's suffering, she's suffering. There's a lot of anxiety there" (suburban, using ability grouping, math/science).

"I've found in doing the leveling there was a tremendous concern with students and especially parents that their child be a one and it had nothing to do with whether the child was equipped to handle that and that bothers me a lot. That bothers me a lot. There's this need for my child to advance ahead of schedule to be the number one, to be the top. Lots of times I made recommendations that weren't in agreement with the parent but based on conversations with the child what they felt they needed, they felt in terms of their comfort zone which to me is more important" (suburban, using ability grouping, math/science).

"...and parents looking to see that their children can be getting into good schools as far as college is concerned. In fact, a parent just said to me when we were talking about mixed grouping, 'Well, I have worked hard with my child. Why should my child go into a mixed grouping and end up helping someone else? I don't pay taxes to have my child teach someone else. I pay taxes to have my child to have the best education he can.'" (urban, using ability grouping, humanities).

"...Because there is a perception on the part of the public that children aren't receiving an education and they have to blame it on something, so let's blame it on how the

kids are grouped" (urban, using ability grouping, humanities).

"No, I've just done it both ways and I like the way it works when you don't ability group. I really do. And I think, too, I can remember in seventh grade geography, when I taught in [another town], it was all heterogeneous. And then they went into high achievement, average and low achievement. And you'd have to recommend, you'd get calls from parents. Even though I'd say, 'Well, your child didn't do that well in geography.' 'Well, I know they're smart.' 'Well,' I said, 'they're not achieving.' And if the parents really wanted them in, if they could be in it anyway, so it was like a joke. I saw a lot as really the parents' perceptions" (rural, not using ability grouping, humanities).

"Parents put them there. Parents said 'Guidance, I want them in advanced' and a parent request is honored" (suburban, using ability grouping, humanities).

Both R and E group teachers believe that parents influence ability grouping practices in schools. They believe that the most articulate parents have the ability to advocate for their children. Conversely, it would seem more difficult for less educated or bilingual parents to advocate for their children. Perhaps parents equate quality education with ability grouping. One E group educator states that she has not heard of concerns expressed by parents in her non-ability grouped classes. It would seem that educators who may want to eliminate ability grouping will have to clearly

communicate to parents that quality education can take place in non-ability grouped classrooms.

Curriculum and Instruction Issues

The issue of curriculum and instruction was largely not addressed by R group teachers in relationship to disadvantages of or reasons to move away from ability grouping. This seems congruent with their belief that ability grouping enhances curriculum and instruction. E group teachers tend to believe that students in non-ability grouped classes can learn to high levels if a variety of methods and materials are used.

Pace and Rigor of Instruction. The issues of opportunities for students, pace of instruction, and the setting of standards also appeared skewed. E group teachers mentioned these as issues on a five to one ratio. They tend to relate these issues to the individual student and not to an entire class. Two typical E group comment were:

"What I like about mixed grouping is that it forces me to look at them as individuals because I feel that there is always a mixture. No matter how [well] planned, it is there, is always a mixture of abilities" (suburban, using ability grouping, humanities).

"I think that many teachers, because of ability of grouping, set the standards for their students according to ability grouping. So if they have a group that they consider to be low, then they don't set their aspirations for those students very high. I think that those kids get the short

end of the stick. I think that not everyone tries to pull the kids to shoot for the stars. I think that many people think that these kids are the toads so they can't do this and they never challenge them. I think that is probably why the trend is for heterogeneous grouping--to give those kids a shot. From the research that I have read and seen, it seems that pretty much everybody benefits from heterogeneous grouping except those truly gifted kids" (urban, not using ability grouping, humanities).

E group teachers seem to believe that ability grouping encourages teachers to set standards by groups and not by individuals. Non-ability grouped classrooms may provide enhanced opportunities for high standards for all.

Different Materials and Methodologies. This subcategory also drew a great number of statements from E group participants, probably because they have more experience in non-ability grouped classrooms. R group teachers also identified the need to use different books and materials, resources, and strategies in a non-ability grouped class.

"...Working in the teams where we have worked on interdisciplinary projects, getting the kids involved in research, being able to see the amount of ability that a child might test poorly and yet can perform very well with a peer and the different talents that they have, and so forth. Seeing that the child really enjoyed the project and enjoys school more--I think that is what I would attribute it to" (suburban, using ability grouping, humanities).

"Statements from some people, like geography and science, are mixed and the [low] kids in those [heterogeneous] classes are getting ...the Cs and Ds and Fs. That bothers me. Why? That's not supposed to be happening. Rub off is supposed to be happening. The low level kid is supposed to be seeing the more motivated students and catch onto some of that and they're supposed to be maybe helped by that top level student and therefore try harder and do better. So why are they still getting Cs, Ds, and Fs? Why? Why can the English teacher on that team who is level and has the bottom kids, why are those bottom kids in her English class getting the Cs, Ds, and Fs? That's scary. I don't know because I would think that, some of that would be erased. That these low level kids would be able to achieve higher but they're all at the bottom" (suburban, using ability grouping, humanities).

"I think they achieve greater success and they can see...They may be successful not taking tests, but maybe they're better at projects and things" (rural, not using ability grouping, humanities).

"I guess I think the processing is so much more important, and I think that heterogeneous grouping gives you an opportunity to kind of work with the kids" (rural, not using ability grouping, humanities).

R group teachers perceive that just doing away with ability grouping will probably not work. Other changes in teachers' behaviors seem to be necessary. Interdisciplinary

instruction and performance-based assessment are two suggested alternatives mentioned.

E group teachers seem to believe that non-ability grouped classes must be more individualized. They perceive that this apparently can be accomplished through process learning and utilizing projects.

Improving Student Skills. Lastly, no R group teachers commented on improving skills and covering more information, but E group teachers stated:

"I don't think that somebody in a remedial class should be spending the rest of their lives adding, subtracting, multiplying, dividing. You know, all the good stuff in the books is in the back that nobody every gets to and it's only the gifted and talented that get to the good stuff" (suburban, using ability grouping, math/science).

This one E group teacher suggests that all students may learn more when "good stuff" is utilized. Therefore, educators may need to move beyond skill development and teach skills through real life problems or situations.

Mathematics Instructional Issues. Of interest to both R and E group teachers is mathematics instruction, presumably because mathematics is often thought of as sequential and easily ability grouped. Also, the presence of advanced mathematics courses, such as algebra and pre-algebra, may perpetuate ability grouping at the middle school level. Typical comments from R and E group teachers were:

"There are different philosophies about how people learn math and there probably are different ways that people learn math" (urban, using ability grouping, math/science).

"The people that are accelerated in math don't necessarily, in their junior and senior year, take those top honor math classes. They've burned out. They don't take any math classes. So there's a slight disadvantage of leveling, but it's not the leveling aspect. I think it's inappropriate leveling, putting too much pressure on the child too early and making them accelerate when they're not ready" (suburban, using ability grouping, math/science).

"They don't learn the math any better [in homogeneous groups]. And they feel worse about themselves and they behave worse because they don't have good role models. ...There were so many who weren't any good at very basic math. So, gee, if we just get them in there and take them through this stuff again and not have them try to keep up with all the other ones. Just take them through this stuff, lower our expectations, and take them through the basic stuff again. But it didn't work. It just wasn't good at all....We were trying to save this group from themselves and we didn't. They just sunk deeper into the abyss....It doesn't work" (suburban, using ability grouping, math/science).

A few R group teachers perceive that students may not take top-level math courses in high school because they may "burn out". They suggest that ability grouping seem to encourage the burn-out of students by pushing these students

too hard too fast. They also suggest that math may not be as sequential as previously envisioned. E group teachers perceive that low ability students do not improve much when placed in low ability grouped math classes.

Class Size. Class size was not a notable issue for either the R or E groups. There was agreement, though, that non-ability grouping requires smaller class size. For example:

"In order to make heterogeneous grouping work you, need to have smaller groups....I feel that heterogeneous grouping could work if it is a smaller group of children" (urban, using ability grouping, humanities).

"An appropriate number for a heterogeneous class would [be] say 20, ...and the max 25" (rural, not using ability grouping, humanities).

Both R and E group teachers perceive that smaller is better. Effective instruction in non-ability grouped classes seem to require active, hands-on project oriented and individualized teaching. This may demand smaller class size.

Also, budget implications may enter into this discussion. If budget reductions increase class size, then it is logical to assume that teaching non-ability grouped classes will become more difficult and ability grouping may be utilized more.

Teacher Issues

This category elicited far greater numbers of responses from E group teachers than from R group teachers. This seems

to support the general feeling that ability grouping is easier for teachers and may not be beneficial for students. E group teachers have much to say about this issue.

Ease or Difficulty of Teaching. Agreement between the R and E groups regarding the ease of teaching is evident. E group teachers support the notion that teaching ability grouped classes is easier for teachers. R group teachers see a reward in observing top students learning at high levels. They said:

"Working this year with a mixed group, I have enjoyed it and have seen a lot. I have seen kids reach and do things you didn't think they could do" (urban, using ability grouping, humanities).

"From a real personal standpoint, I think it's time that we stop being a teacher-centered institution and start to look more to the kids. I mean bottom line, ability grouping makes it a lot easier for me to do my job" (rural, not using ability grouping, math/science).

"[Non-ability grouped classes are] not easier for the teacher, but it is more fair for the kids--across the board" (urban, not using ability grouping, humanities).

"[Heterogeneous grouping] makes my classes more enjoyable" (rural, not using ability grouping, humanities).

"[Heterogeneous grouping] also forces teachers to keep kind of updated because you've got to go with new techniques constantly to deal with the kids. I think it also offers an opportunity for teachers to keep on realizing that individual differences are not bad. It's important to

recognize those in kids, and to make the most of those" (rural, not using ability grouping, humanities).

"I am enjoying classes a lot more with [heterogeneous grouping]. Those low classes can be deadly. You would ask a question, and you know I consider myself pretty energetic, and those 45 minutes were long an awful long time. I think the day goes by much quicker when you have two or three things going at one time. It is more fun than anything else and school should be fun" (suburban, not using ability grouping, humanities).

"...Ability grouping was fun in the beginning but the only fun was the top two groups" (urban, not using ability grouping, humanities).

"Yes, [non-ability grouped classes are] very, very successful. I have had the best year that I have ever had in spite of a lot of other things, which makes it that much more powerful to me. There is a lot of things we did, that school choice thing this year, and it worked. A lot of things that were working against it and it was successful. ...I cannot go back to homogeneous grouping" (urban, not using ability grouping, math/science).

Both R and E group teachers enjoy seeing students learning effectively and enjoying school. This may be motivation for teachers to develop effective non-ability grouped classrooms. Teachers enjoy seeing work that all students can do. E group teachers specifically mentioned that teachers must become student centered. Opportunities for teacher growth are seen as positive experiences.

Teaching in non-ability grouped classrooms, while challenging, is viewed as rewarding and effective for students. This seems to help negate the perceived ease of teaching ability grouped classes.

Teacher Expectations and Professional Development. A great number of responses were categorized under teacher expectations and teacher training, professional reading, research, trends, and professional organizations. Twice as many E group participants stated perceptions in these areas as did R group participants.

E group teachers stated:

"What happens in [ability grouping is] that usually you'll get the teacher with the most seniority who gets the high achievement kids. I was the newest person on the faculty so I never got them" (rural, not using ability grouping, humanities).

"My expectations, of course, are higher for the one groups or two groups than they are for the three or four. I do have people in both the three and the four groups who work very hard; they give you the best they've got. You know, they only have the brains they were given" (urban, using ability grouping, humanities).

"It's been my past experience that the kids that are tracked in the low ability groups are never given the opportunity to advance upwards especially if it's based, and it's been based solely on testing. I mean, some kids just don't test well, and you have to explore other options--oral test options, having kids do things hands-on, and evaluating

them that way. Your expectations, I find not mine, in particular, but in talking with a veteran staff, expectations for kids that have been put into low level and middle level ability groups are considerably lower than those that have been tracked at a higher level ability" (rural, not using ability grouping, math/science).

For a variety of societal reasons, both R and E group teachers agree that students in schools today are different than students a decade or two ago. This MAY require that schools modify what they have done. Ability grouping may lower expectations for students. It also implies that students are not encouraged to participate in enriching projects or papers. E group teachers believe that in non-ability grouped classes all students are expected to learn. By using a variety of innovative techniques in non-ability grouped classrooms, teachers may be able to address student diversity more effectively.

Lower Expectations. Both R and E group teachers believed that teachers hold lowered expectations for all students in low-ability groups. Having individual expectations about each student seem to help teachers to hold high expectations for all students. Non-ability grouped classes seem to encourage teachers to develop these individual expectations.

R group teachers stated these perceptions:

"...and I think that teacher expectation is also dictated sometimes by the labels....The most recent research has indicated that it seems to be the way to go--to go with

heterogeneous grouping" (suburban, using ability grouping, humanities).

"I would be willing to try heterogeneous. I would like to see people trained in how to do it. I think that is our big problem--how to do it--how to approach a heterogeneous class and be successful....A teacher would probably refrain from having the students do extra projects or term papers or any other programs that may follow" (urban, using ability grouping, humanities).

"You were always locked into a certain . . . a class was presented to you at a certain ability level and that is how you handled the class. You are finding that even though, for example, right now we have our four divisions of ability grouping here, they are not as strict as they used to be so a lot of things have to change and you have to change accordingly. You find when you teach even a top group or close to top group it is different. Your approach is determined by the teacher. You have to change a lot of your aspects on teaching. You have to change your approach and your material" (urban, using ability grouping, math/science).

"Well, there have been many reports and many studies done on [ability grouping] and it's just not the Carnegie Report. I've read ...a great deal of literature about this, and I can see it but I'm not an advocate. They may be right I just don't know....I think it's a trend like everything else in education, and I read the Carnegie Report that also stated that homogeneous grouping was the worst thing that we

could do to a middle school child and perhaps they're right. I'm just not one of those people who's really an advocate of it [heterogeneous] yet. I may be. I'm willing to give it a try" (suburban, using ability grouping, humanities).

"I think that under the right circumstances it may be beneficial to the kids and it could help me. I am just more used to the ability grouping and that is where my experience is." (urban, using ability grouping, humanities)

E group teachers stated:

"You are not giving the kids opportunity to learn from the others. You ...as a teacher, you have a rich experience if you have non-ability grouping because then it is a challenge for you. You have to look for different techniques, teaching techniques, and you have to think how to reach the students too. And you are giving the students a very rich challenge to perform because you are telling the student, 'Okay, you are here because you can do it. You can do it and I know you can do it because you are here.' That really works--it does work" (urban, not using ability grouping, humanities).

"In-service work, project adventure, and a lot of cooperative kinds of games and activities that, in fact ...some of the course work I took back in college when I worked on my Masters degree related to, in some measure, heterogeneous grouping" (rural, not using ability grouping, humanities).

"Because of literature, because of conferences, because of workshops, because of people telling me [not using

ability grouping] it is better and of giving us a chance to question [ability grouping] and to lose some of the elitism that we all have, we were all raised with some kind of tracking ability, and so now we are thinking maybe there is something else" (suburban, not using ability grouping, humanities).

"My philosophy has always been for heterogeneous. I have been trained that way. So I found it more difficult to teach homogeneous....I do not want to go back to homogeneously grouped classes. If it means go back or don't work, I am going to go back, and I am going to do whatever they tell me to do. But if I could choose, I would choose even in a reading class to go heterogeneously grouped" (suburban, not using ability grouping, humanities).

"I was passive. [Non-ability grouped classes] were just all around me. Passive but not oblivious. It sunk in somewhere along the way and actually my first year here I worked with ...a first year teacher, no longer here, who was ahead of his time on all of this and so I had to listen to all of this. He was a student at the university and doing everything, and I listened to him because I had to. I guess I'm setting up a case for putting things in people's mailboxes....One exciting thing for me is that I feel that I am just learning and I can't wait to try it again. I'm looking forward to next year....The evidence...I looked at it like a scientist and everybody says that it works and so this is my experiment" (urban, not using ability grouping, math/science).

R group teachers seemed to want to know how to teach in a non-ability grouped classroom. Some state that they are willing to make this transition and that it may be beneficial for students. No R group teacher said that he or she would never be willing to alter ability grouping. Both R and E group teachers cite literature, research, in-service training, conferences, workshops, and college courses as helpful in learning new skills and techniques. Talking and listening to colleagues and personal experimentation also seemed to encourage change. This is not a significant departure from what is known about effective staff development practices.

Personal Reasons and Thoughts. As previously mentioned, personal reasons about education were strongly worded by E group participants regarding the disadvantages of ability grouping. Similar statements were made by R group participants but not in large numbers. Statements included:

"Experience helps you determine your thoughts" (urban, using ability grouping, humanities).

"It is hard to change old ways sometimes" (suburban, using ability grouping, humanities).

"I grew up with ability grouping and I never thought much of it. But I'm sure a lot of teachers...I was always in the high ability group. I was always put in honors classes. ...I speak from a personal reference. I have a child who is at the high end near superior in intelligence but we live in [a nearby town], and in that town, that's probably average. So she was in a low reading group. She had all the worst

behaved kids in the school. We finally moved her to a private school, and I am a strong advocate of public schools. But when you see a sweet, wonderful child who spent a whole year probably learning nothing because there was three incorrigible children in the classroom. And they were in her reading group, and we knew she would stay with them. And that's awful. Somebody talked about, well, those were the kids in the lower reading group, and I wanted to say to this mother, 'Excuse me, but in a town like that, what is not up to grade?' And she was one who was reading right on grade level. But in our town, you know, for a kid with an IQ like that, 119 is an average IQ, which I wonder. You see it. I think that's hard on children. I really do. I think you can do it in other ways" (rural, not using ability grouping, humanities).

"I think it was a personal....What happened with my own family that alerted me to maybe [ability grouping] isn't working and then, secondly, it was an experience I had in the classroom. The personal instance was the oldest daughter being at the high level of achievement and benefiting from going through and then the devastation that I saw to the younger daughter who was innately quick, but didn't perform as well, and so, therefore, was down in reading groups and what got done to her. So then I began to question it; and about the same time, I had a seventh grade class in English where I could mix the abilities. I took two of our most gifted students and paired them with two of my most disabled students, and they ended up with the best work. And that

turned out to be a phenomenal experience for all four kids. And given the right setting and given the right set-up, there was a tremendous amount of success, because with two on each end, they could (and it was English so that they were pair responding) pair respond with strong and disabled and they could pair respond disabled and disabled and strong and strong so that I wasn't taking anything away from anybody. They worked it as a foursome, and they had to pair respond with two people. What was interesting was that the two students who had the learning disabilities (they were writing disabilities, significant disabilities), have personalities they brought to the group, and they were strong personalities in the class. And athletic youngsters who were popular so that they brought something to the group that made the other two feel and, I think, the other two students had a chance to look at these kids and realize what they were operating under and what they took for granted. So between the two things, I was converted" (rural, not using ability grouping, humanities).

"I think my own experience primarily....I don't think I came into this with any prejudice one way or the other. I had the experience of growing up in an ability grouped arrangement; but having taught primarily in a heterogeneous grouped environment over the years, that's how my teaching methods and styles have essentially developed from that background. So I'd say really from experience would be the basic thing that's driven me" (rural, not using ability grouping, humanities).

"I guess because I have four children of my own, and one, our oldest (our ten year old), has been in special education. He's a very, very bright boy, but he has a learning disability--language oriented; and I picture him in a middle school being put in the bottom level, trapped there. I think that's horrifying because he is not of that ability as far as motivation, thinking, application, but skills and maybe some application. You know, wise, he would probably be trapped there and I think that would be horrible. So I think, thinking of my own children and where they could end up has been an influence, a strong influence" (suburban, using ability grouping, humanities).

"My own kid, I have seen it with my own kid. It's hard to express but they group kids by minority, and I don't consider that I am minority....I have my own kid in a regular classroom at the tenth grade level, and he has learned English a lot. But grouping the kids saying that these kids because they are Puerto Ricans they cannot perform, they cannot learn, you are telling these kids that they cannot learn. We have changed by coming here to this middle school and having the opportunity to see other environments" (urban, not using ability grouping, humanities).

Personal experience seems to be significant in determining how teachers think about ability grouping. R group teachers generally had positive experiences with ability grouping. E group teachers discussed personal or family situations where ability grouping was perceived as

problematic. Of note is one E group teacher who had a positive experience with ability grouping but was trained for and supports non-ability grouped classes. Certainly being a parent or being somehow personally affected by ability grouping can impact teachers' thoughts.

Changing from Ability Grouping. Teachers expressed in a variety of ways their beliefs about changing from ability grouping to non-ability grouped classes. Many teachers commented about changing their behaviors and methodologies about ability grouping. Issues included the various reasons to consider changing, and the role administration played in this change. Comments from both R and E teachers were:

"I guess I have no choice whether or not I'm going to give [heterogeneous grouping] a try. We have been told that we are going to do it, and we're going to do it. It's not something that the majority of people in the English department want to do. We have been told and so, therefore, in order to keep a job in 1992 you do what they say....We were not even consulted about this. We were mandated. It was an announcement made in a faculty meeting in which [the principal] got up and said, 'You have no choice. This is what we're going to do and you are going to do it.' And I have found that teaching [here] 16 years, that this is the way things come down in [this town] and so there's a lot of resistance when people feel things are being pushed down their throats all without any explanation" (suburban, using ability grouping, humanities).

When asked what would you do if it were totally up to you, this teacher reported, "...I don't see [heterogeneous grouping] as a possibility because in our school system administrators take care of what type of ability grouping you may have, how you will have them, and when you will have them" (urban, using ability grouping, humanities).

"I think you have to be flexible and you have to change with the times. If changing would help the students and they would be better, then I think that would be the thing that you do" (urban, using ability grouping, humanities).

"Well, if the school changed overall, and they said "We weren't having it," then, I'd go along with [not ability grouping]. I would" (suburban, using ability grouping, math/science).

"...On the lower end, if you could see any progress or if you saw a lot of disruption on the upper end, if the students weren't motivated. If there was nothing happening to allow them to explore their potential within the school setting, for instance, budget cuts and things like that--if it wasn't feasible that they could go do some of the extra things. I don't know; they are so diverse and there are so many needs. Unless the drug problem was totally eliminated and the world problem was totally eliminated and the budget problem was totally eliminated and everyone cared about their kids, then we could mix them up" (urban, using ability grouping, humanities).

"Probably because I will take risks and you know I read about [ability grouping], particularly in math and not only

this but community service and all sorts of things; but when you read about it or hear people talk about it, I just take in all the evidence and that demands a verdict, I figure you know it is time for me to give it a try and see what they are talking about" (urban, not using ability grouping, math/science).

"...because we have the minority population growing quickly and I think to provide equal education for the kids, that is one of the reasons heterogeneous grouping is so important" (urban, not using ability grouping, humanities).

"[He] was a great principal. He allowed that flexibility that if you came to him and said, 'Look, I have this great idea', he trusted me enough to say, Go for it'. So I did....I think it [homogeneous grouping] can be racist, it can be" (rural, not using ability grouping, humanities).

"I think that looking at it globally and with all the varied personalities of the teachers and what they are willing to do and not do, I think that heterogeneous grouping is something that has got to be done. I think that it will stretch teachers and that it will give those poor kids that are not given opportunities the chance to really shine" (urban, not using ability grouping, humanities).

"I think administrators that we've had have been real supportive of heterogeneous grouping. But I think this, you know, you've gotta have the guts to say to people, 'Look it! [Your doing it] whether you want to or not.' I think it's great if teachers buy into it, but I do think that you have

to look at what's best" (rural, not using ability grouping, humanities).

Of interest in the teacher category are comments of E group teachers regarding the fact that the present system is not working, the fear of change, and the willingness to try something new. Comments were:

"The big factor is when I did ability grouping it didn't work" (rural, not using ability grouping, math/science).

"Because [we are] not talking about the human condition of the kids, we are castrating the kids. We are doing what we have been criticizing the society of communism. Communism says that everybody is equal and we say that too, but I don't think that this is a democratic practice. It castrates the kids. It really it does, emotionally and intellectually" (urban, not using ability grouping, humanities).

R group teachers seemed to resent administrative control over determining ability grouping. They realized that significant changes in classroom experiences must take place. They seemed to want a greater say in this decision.

E group teachers also mentioned leadership. Principals who encourage staff to change, and who have the "guts" to stand up to pressures to retain ability grouping, seem to be admired by teachers. E group teachers seemed willing to "give it a try". They recognize the growing minority population and racial issues as important reasons to change. Central to their thought process was the fact that ability grouping did not appear to be working in their classrooms

and "really hurt" students. Teachers seemed willing to invest their energies to help students learn more by changing ability grouping practices.

These are important concepts for those interested in changing ability grouping practices in schools. All of these reasons had significant impact on both R and E group teachers.

Influence of Middle School Ideology and Organization.

Middle school ideology and organization helped teachers see students in different ways. It seems to enable teachers to see academic growth within the context of the individual person. Issues associated with middle school education and ability grouping are addressed twice as often by E group teachers. R group teachers said:

"I think here at the middle school we're really focusing on the child more than the curriculum and that's the key issue" (suburban, using ability grouping, math/science).

"Also going to be teaming next year and we have already said that if we run into a problem we will move a child ourselves. So we are going to have a lot more flexibility. Not involving administration or guidance to move a child. We simply say, Okay, we are going to put them in this class and move this one out and so on and so forth" (urban, using ability grouping, math/science).

Enhancing those comments are statements from E group teachers:

"See, I always saw that as the difference between a middle school and a junior high school. Junior high school was an ability grouped, academic driven program that was a junior high school. Middle school, at least in a way I've been involved in, is to focus on other developmental aspects of children besides just the academic growth and to focus on the uniqueness of this development you're dealing with, stage of development your dealing with concerning middle school kids, and not have middle school be just a miniature high school, but to deal with where the kids are in a stage of development they're at--The middle school level--and then they get to high school and can deal with being at high school....I think the middle school should focus on the development of the whole child and not just on their academic development. I think, especially in the social studies and in history, what you want, what I want kids to be part of in their early years is an environment where they're with everyone of all ability, of all background. In our country, what binds us together as a people, is not our ethnic backgrounds or religious backgrounds. What binds us together is our democratic principles and beliefs and I think in order for people to function effectively in a democracy, coming through a study of history and civics, they need to have an experience where they're in a room with people who are smarter than them, dumber than them, richer than [them], poorer than them--the whole gamut of background--particularly for class discussion, [and] projects that I do. For example, currently I'm doing a mock

congress right now. It's good for kids to be hearing different viewpoints and dealing with and interacting with kids of different backgrounds. What you sacrifice is maybe some of the academic growth, if that's what you're seeking; but on the other hand, you're rounding them out, filling them out in other areas--socially and emotionally--preparing them for adulthood, dealing with a wide range of people" (rural, not using ability grouping, humanities).

"As a middle school here, we have learned because we were all junior high school people which was the preparation for the high school and now we're trying to realize no they don't need preparation for high school. They need to be marinated, and we will take care of these kids during this moment" (suburban, not using ability grouping, humanities).

"...I think that in a middle school, we have the chance, maybe, to develop the person more and the amount of math that they learn along the way is almost as well. I don't think that you can separate them in developing the person. You have to be willing to learn a lot more than math. I guess that I look at it that in middle schools we are developing the person first and the subject is fine and that heterogeneous groups emphasize the person and the subject matter is intertwined into that" (urban, not using ability grouping, math/science).

The notion of flexibility was also addressed by R and E group teachers. An E group teacher said:

"The fact that we are a middle school and the philosophies that go along with, have played into [reducing

ability grouping] even more. It reflects our newly acquired flexibility, our newly acquired ability to say, 'Well, it doesn't matter today; we'll do this instead.' That kind of flexibility never existed before" (suburban, not using ability grouping, humanities).

R group teachers perceive the growing acceptance of a middle school ideology as helping to change ability grouping practices. They cite flexibility in placement and scheduling as well as a child-centered approach as enhancing factors. E group teachers similarly perceive that the middle school's concern with the whole child can help to reduce ability grouping. Flexibility, consideration for the non-academic needs of students, and the exploratory curriculum seem to enhance non-ability grouped classrooms. Teachers believe that non-ability grouped classrooms presumably bring students together and focus teacher attention on the person first and curriculum second. This seems to indicate that adopting a middle school program and ideology encourages the change to non-ability grouped classrooms.

No trends were noted in the differences between urban, suburban, and rural schools within these categories or subcategories. Perhaps this is because teachers think about their work in relationship to themselves, and not in relationship to their setting. It is interesting to note that the reasons for changing ability grouping practices elicited a greater number of responses than reasons for retaining ability grouping. Teachers seem to be aware of the many disadvantages associated with ability grouping. Most of

the issues raised in Chapter II have been addressed by R and E group teachers. This may indicate that teachers are knowledgeable of research and that research appears to address their concerns.

Alternative Grouping Practices

Teachers addressed alternative grouping practices through statements regarding their perceptions about students working together and flexibility. This section will report those findings as well as teachers' perceptions regarding the adjusting of curriculum materials and strategies for dealing with diverse students within the classroom.

Students Working Together

Group work emerged as a primary alternative to ability grouping. Over half the E group teachers suggested group work as an alternative strategy in a non-ability grouped class. One-third of the R group teachers also support group work.

Cooperative Learning. Cooperative learning was mentioned by both R and E group participants as a viable alternative to grouping by ability.

"I can see English as an area which can be very individualized to be heterogeneously grouped doing projects, doing cooperative kinds of things, being very successful, and being very good for the student; and that's the bottom

line at this school--to meet the needs of the student and make them feel comfortable with [and] good about themselves, good self-esteem. Probably a cooperative approach could be successful with the middle school concept in mind" (suburban, using ability grouping, math/science).

"The way things are going now, I think that if you could combine the heterogeneous grouping with the cooperative learning, ...that would really help....I think that with the cooperative learning it is the way to go" (urban, using ability grouping, humanities).

"You can't do [non-ability grouped classes] unless you go the cooperative learning route because once you get a heterogeneously grouped class there is no other choice but to go with cooperative learning" (urban, using ability grouping, math/science).

"We do cooperative learning. Quite often I'll randomly assign them numbers and what happens is you'll generally have a pretty good distribution of different types of kids. When we do long, cooperative learning activity packets, I pick the groups purposely and I'll try to pick each group to have a student who's...I'll try to do a mixture of kinds of students. And I think that's actually not grouping. It's actually different kinds of kids in a group. So maybe that would be it for me" (rural, not using ability grouping, humanities).

"I use cooperative groups in geography, and I've used them in English. I try to use a mix within a classroom that would take into account diverse learning styles, diverse

personalities, and the strengths and weaknesses of the students so that the group will call forth from that their best effort than....What am I trying to say? Rather than a fighting type of a thing, a cooperative effort. What kind of engineering can I do within a classroom of a given 20 students to bring forth the work, the best work out of that group? And I take into account those factors" (rural, not using ability grouping, humanities).

"First you have to identify who your learner is and then look at the way that's most important for teaching those kids, cooperative learning and activities, those kinds of activities; and then I think you'd be very successful" (rural, not using ability grouping, humanities).

"I've been trying to do more with cooperative learning to try to get kids of different abilities to have me form the group to try to access where the kids are at. I guess that, you're dealing with ability grouping, and then try to put, try to force a group together of kids of different abilities, try to make it more structured than I have in the past, some direction. I've been working with that the last year or two and that's become a more popular thing. I've taken some in-service work in it, and I'm more familiar with some of the methods of cooperative learning" (rural, not using ability grouping, humanities).

"I just want them to understand how things work. I've been finding that I'm letting them rely on each other a lot more and doing a lot more in terms of checking--doing a lot more checking for understanding than I used to do and also

trying to work from one step to another, trying to start with kids knowing what a concept is and then being able to say in their own words what it is ...and then just trying to be able to interpret it, analyze it, and trying to reach more levels of kids....The kids are climbing up that continuum so that they're getting it too. And they are. I think it really helps....Cooperative learning can be the answer to heterogeneous grouping" (rural, not using ability grouping, humanities).

"I do cooperative learning. I teach. I still teach as though I'm teaching to a high level group....Oh, I do a lot of peer tutoring, a lot of individual group work. A lot of that, a lot of games, a lot of ways where you approach one subject with a variety of different approaches instead of demanding that the kids write a conversation about something. There's a big choice factor now. You can talk about it, you can write about it, you can do a project about it. So it still gets done. Those kids who are superior at writing will choose to write. Those kids who can speak will choose to speak. So everybody kind of has a choice as to how they want to perform so all levels get the opportunity to perform" (suburban, not using ability grouping, humanities).

"I would definitely use cooperative learning, I've been trained, and I've tried a lot of things since my training and they work and even if we didn't change over, I would still use cooperative learning in my ability grouped classes....Cooperative learning helped me see a method that

you can use to have high, medium, low work together"
(suburban, using ability grouping, humanities).

Teachers perceive that cooperative learning is a powerful strategy to use in non-ability grouped classrooms. For teachers wishing to alter their grouping practices, investigation and implementation of cooperative learning seems the appropriate first step.

Other Student Group Work. Other kinds of group work were mentioned numerous times by E group participants and by two R group participants. Typical statements include:

"I think that I probably would try to group within my own classroom, and I would probably use students more to help other students in the classroom. I use that now on a limited basis but I would probably use it more" (suburban, using ability grouping, math/science).

"You can use peer teaching as well....[Peer tutoring is] an effective way of dealing with a child in a one to one situation where a teacher may not be able to get to a particular child within a team teaching situation. They can be serviced in that way" (suburban, using ability grouping, humanities).

"The actual learning that takes place. You use a stronger...pair, stronger students. I mean...I do my groups very carefully, pairing stronger students and weaker....I don't know. I don't like stronger and weaker, but pairing different learning styles and different abilities so that they all bring something to the group and their strengths are appreciated and their weaknesses can be overcome on both

sides....I want a real world [situation]" (rural, not using ability grouping, humanities).

"I really have kids rely on each other a lot more because the important thing is that they're learning" (rural, not using ability grouping, humanities).

"My seating charts. My seating charts alternate good and bad students; one behind the other and across so that I can have pairing with the person across from you or the person behind you. They can work together in twos that way or we can pull four over together and they're balanced, and it works exceedingly well. And I've changed those groups. They have no choice about those groups at all. I do it. Whenever I start off a class, I haven't got to do that here yet, but when I start a class at the beginning of the year, I draw sort of a sociogram where I'm drawing lines all over the place and seeing who I think ought to be together and then, from the very first test, I align them. I do it over and over again, test after test, changing seating around so that they're pretty well balanced out that way. And it works exceedingly well, especially if I can come up with verbal stuff where they have to talk about what they're doing. If you can have one good one and one poor one and a couple in the middle, that's the best. But it varies according to what you can do because you've taken a lot of other considerations like, for heaven sake, don't seat them with their best friends; and if it's going to be a shy little girl, she's probably not going to do very well with an aggressive boy. So you have to take a lot of different

things into consideration when you're doing that. But it works very well....I simply can't have them working in any group. Everything else interferes. I know that when I have heterogeneous, it will be a lot easier to arrange that" (suburban, using ability grouping, math/science).

"Since I have been teaching and experimenting there is a lot to be said for peer tutoring. You know where you've got higher and lower ability kids working together" (urban, not using ability grouping, humanities).

R group teachers seem to believe that students helping other students is a key to working successfully in non-ability grouped classrooms. Peer tutoring is mentioned in addition to cooperative learning. E group teachers also mention peer tutoring--students talking and teaching each other as productive strategies in non-ability grouped classrooms. Teachers describe various grouping arrangements to help address the learning styles of young adolescents. E group teachers feel that having students working together in groups reflects society and the real world.

Flexibility in Grouping Practices

Consistent with the notion of students working in smaller groups is the concept of flexibility. Teachers seem to suggest that grouping students based on the type of lessons would be appropriate. This was more frequently stated by R group teachers than E group teachers. An R group teacher said:

"I ...still 'read' the kids, still 'read' myself and determine what is what" (urban, using ability grouping, math/science).

More frequently mentioned by R and E group teachers was within class/within team grouping.

R group participants said:

"So, it depends on what I'm using and what I'm structuring for the day. If I'm reading, that's a whole different ability group. Sometimes the same group that I have for hands-on activities is a different group than I have for trying to solve problems" (rural, not using ability grouping, math/science).

"Within the classroom that I observed there was leveling, the three groups because the teacher just couldn't handle the three different distinct backgrounds, prerequisites so that she leveled within a non-leveled class" (suburban, using ability grouping, math/science).

"We can group within the classroom which I don't want to do" (suburban, using ability grouping, humanities).

E group teachers said:

"Grouping within the group? Right. For example the kid who does not know how to write a letter cannot do this lesson until I give a mini lesson on how to write a proper letter and that is when I will teach the specific skill if I have to" (suburban, not using ability grouping, humanities).

"But then before you organize into non-ability groups you should have the profile of all these children. And knowing all the students, you can group them together; but

then you should group kids with high ability to there because then you can use cooperative learning in the classroom using the right kids. So you should know the kids to group them together. The problem that you are going to get is scheduling. You should think about the scheduling and it is not a free-for-all. It is not laissez faire. OK we are not going to have any grouping and you are going to put all those kids together. You have to know the kids" (urban, not using ability grouping, humanities).

"You know the grouping changes...flexibility...to avoid the stigma of a kid being in the same group all the time each time it changes....So the group for reading is not the same group of kids that go to science or that go to math. ...It sounds like it is working" (urban, not using ability grouping, humanities).

"A [school] schedule couldn't be done [until Labor Day]. People don't understand how complex our schedule is and will make decisions without consulting most of the schools. The kids are in groups that move around together all day. Ours never do....We group and regroup every period. ...We asked for the students to be heterogeneously grouped and sent to us, and they weren't, and that was a surprise to us that we didn't get what we asked, so we scrambled the first two days of school, spent all our extra time and nights doing scheduling, and created a bizarre schedule with all these heterogeneous groups with modification. We had committed to a group of 20 students that could take algebra this year. So we pulled that class out and only for that one

period during the day though because we did not want them to move around together. So we grouped them by the seat of our pants did what we wanted to do as far as grouping. What we did we didn't go all the way back to the records. We took the homogeneous groups and a parent took four from each of the homogeneous groups and formed a new class grouping" (urban, not using ability grouping, math/science).

R and E group teachers offer many suggestions for, and advantages of flexible grouping practices. Within class grouping arrangements designed by teachers for students are suggested. Groups based on activities and process learning could also be developed. Mini-lessons addressed to skill groups is yet another option. In order for teachers to successfully group and regroup students they might need to (1) know the students, (2) have a flexible schedule, and (3) have the power to change grouping arrangements. If teachers can move students within classes and between classes, it seems that they will have an effective tool to use.

Adjusting Curriculum and Materials

The adjusting of curriculum and materials elicited the greatest number of responses on ways to handle students in a non-ability grouped classroom.

"I would have to greatly adjust the amount of individualized attention I give to the students. I would have to adjust the method of presenting material....I would have to, knowing all this...I think I would have to have a greater variety of activities in the different class

periods....I don't think I could ever run a whole period of just lecturing" (suburban, using ability grouping, humanities).

"Trying different methods with them. Trying different approaches with classes. Maybe trying some of the things that are considered to be quite advanced. We did a unit on irony and I did that with what is supposed to be my lowest level, and they had a very good understanding of different types of irony and came up with excellent examples and so forth....We did a mystery unit as well and the kids were on all levels for that as well" (suburban, using ability grouping, humanities).

"My commitment to the new math standards flows right into this too. For me, a lot of things are just coming together at the right time. It is working for the kids and the groups that I have are happy and they are learning" (urban, not using ability grouping, math/science).

"If I use the same guidelines, curriculum goals, sequential goals that I have in the past, [non-ability grouped classes don't] work. It can't work. If I look at it in a different point of view and say well perhaps we need to do things this way, perhaps my goal needs to be this, then that's only watering it down. It's changing the approach to it where sometimes the kids might marinate a little longer in one activity, without necessarily having to get to Chapter 12. Chapter 12 might not be essential for them. So what I do in the 7th grade class is I simply decide what skills do I want them to have at the end of year. I still

have brainy kids who do great. I still have weaker kids who don't do as well as the brainy kids do but they have their own strengths. Those have to be rearranged....it does change the old goals, so the goals have to be redefined" (suburban, not using ability grouping, humanities).

R and E group teachers seem to believe that curriculum and materials must change to be used effectively in non-ability grouped classrooms. They believe that limiting lecture time and offering a variety of activities will increase individual attention and student learning. Teachers further recommend adjusting present methods to enable higher level, critical thinking activities at all levels. E group teachers believe that with appropriate classroom changes high level effective learning can take place. Both R and E group teachers believe that non-ability grouped classrooms can offer appropriate challenges to all students.

Individualized Learning. Both R and E group participants mentioned individualized learning as an important aspect of non-ability grouped classes:

"Unless I drastically changed my teaching methods to more individualized instruction, type of work assignments. ...Somebody would lose out in my opinion unless I had more training, unless I, drastically...changed my teaching methods" (suburban, using ability grouping, humanities).

"My number one thing would be individualized programs. I think it could still be successful with grouping within the classroom for certain activities or different expectations or modifications on the other end depending so

that you know the child that needs to be challenged is challenged and the child at the end, you know at the lower end of the spectrum, gets whatever she needs to be as successful as they can be with what they have" (rural, not using ability grouping, humanities).

"Obviously there are times when you have to teach to certain people and with the low kids I pull them out and I will teach a mini-lesson if I need to or whether it be after school or during our activity period or in class....We need more enrichment. I use enrichment with the top kids so I really try to have two or three different activities going on in a day" (suburban, not using ability grouping, humanities).

"...But know that I am dealing with kids and that I have involved myself in a project with a regular teacher, taking my bilingual kids to his regular classes and working with them and even giving the kids the opportunity. I have a class of kids who are slow learners, and I have been moving them to the other class where the kids learn faster. You ought to see these kids performing. The grades have come up - it takes my time, it does take my time, and it doesn't give you a minute. You have to plan your class to reach all of them, but it is rewarding" (urban, not using ability grouping, humanities).

Differentiated Curriculum. Teachers discussed using many aspects of differentiated curriculum in non-ability grouped classes. R group participants said:

"The adaptation of the material, so ...all the students get the same curriculum" (suburban, using ability grouping, humanities).

"I think that you would have to be more flexible with each student. Some might be able to say do questions 1,2,3, and 4, and there might be some students in the class that you are going to have to spend more time with. Probably would have to have a much more hands-on structure with the students and also them with you. They have to know that Mary Jones over there gets it like that and Tom doesn't. He has to let me know so communication would be extremely important" (urban, using ability grouping, humanities).

An E group participant said:

"In English, it's hard because some kids would like to really read more intricate novels but...and maybe you could have different kids reading the same kinds of novels or... Of course, you would have it within the classroom" (rural, not using ability grouping, humanities).

Thematic Interdisciplinary Instruction. An equal number of responses centered around the use of thematic interdisciplinary instruction, class size, and teaching methodology. Examples from R and E group teachers include:

"I really believe in the middle school concept for certain issues. If I'm doing an interdisciplinary type of project with a whole bunch of teachers, that's when I want to see everybody mixed together" (rural, not using ability grouping, math/science).

"For example, one of the themes that we have in the 7th grade curriculum is understanding other people and cultures. ...The kids would need to go off on different tangents after that. ...They would write to me; I will write back to them, which is more an individualized kind of workshop than it is the teacher getting up in the front of the class and teaching" (suburban, using ability grouping, humanities).

"You can get the benefits of meaningful projects where all the kids could be involved and you might even get some students [who] maybe test poorly but could be motivated by working on projects, interdisciplinary projects and so on" (suburban, using ability grouping, humanities).

"We came up with this interdisciplinary unit between two teams--the 7th and 8th grade--and I have seen the top kids really jumping in on this as a choice or making it a choice. That is what we need more of" (suburban, not using ability grouping, humanities).

"Community service" (urban, not using ability grouping, math/science).

Individualized learning, differentiated curriculum, and thematic interdisciplinary instruction can likely enhance student learning in non-ability grouped classrooms. Accommodating individual needs is frequently mentioned by both R and E group teachers. Adapting material, offering different assignments, hands-on activities, and meaningful projects are activities that are especially well-suited to an interdisciplinary curriculum. Community service also

seems to help teachers teach in appropriate ways by establishing active, relevant learning environments.

Materials, Books and Curriculum Modifications. The greatest disparity of responses of E group to R group participants centered on two issues: time, and materials, books and curriculum modifications. An R group teacher stated:

"Instead of one basal, you might need to use a trade book approach;...almost like an individualized approach" (suburban, using ability grouping, humanities).

E group teachers said:

"I mentioned before sending people out of the room, like during testing, the extra time, modifying assignments. Extra help" (suburban, using ability grouping, humanities).

"If you don't have ability grouping you've gotta look at other ways to evaluate your students besides a test. You can't make the test the major component of your evaluation. Because the range of ability in a non-ability grouped class is so wide, you try to give them a common test. It's too easy for some students and too hard for others....At least in my experience, I make the testing about 30% of the grade I'm giving the student. I have 70% in other areas that I'm evaluating....The other thing I tend to do is give them a common element of achievement in terms of doing the homework. The biggest struggle with students at this age is getting them to do the work...so my grading system...the way I do this which is a way I can put everyone on a level playing field in classes. If the student does the work to my

satisfaction on the homework, they get 100%. If they need corrections or make mistakes, they get a 50%. They then have a chance to correct the paper on their own or with my help or other teachers in the schools help because we have the special ed students in this class. I have remedial reading kids mixed in. I have the whole gamut. So they may get help from other teachers. Once they've corrected the mistakes, then they can get 100% on the paper. And so, throughout the course of the semester, what I'm rewarding is how hard has the kid worked, how hard do they want to correct their mistakes so that the brightest kid in the class in terms of ability and the dumbest kid in the class in terms of ability can still get 100% on what is 20% of their grade which is their homework average. So that's kind of a way I adjust for the different abilities and so (especially for middle school students, adolescents) that's a major goal is to get them to be responsible for doing their work, turning it in, and not just saying well the heck with this, forget it. The brighter, bright kids, as well as the slow learners, can be lazy at this age, disinterested in school or whatever. So we're trying to build an incentive for all the kids to realize that it's not a matter of intelligence in terms of whether they a 100% homework average. It's how hard they want to work. So...my major way of adjusting to the different abilities in a heterogeneous class is to adjust the way I'm grading them. So in reality, what it means [is], let's say a student has a 65% test average but a 100% homework average and the tests are 30% and homework 20%,

then I have projects that are 25%. You put it all together, that student might come up with a 'C+' or 'B-' for a grade, whereas the bright student (I've had students like this who ace the test), they're really bright kids, but then they're lazy. They may get a 95% test average, but they don't bother turning in the homework and wind up with a 78% score as well. Although, I can also say kids who tend to do well on tests also tend to turn in the homework and get the 'A' but it doesn't...what it means is that if you have a very academically test-oriented evaluation system, some kids get an 'A' in that class and some kid, no matter how hard they work in these classes, flunks. So you've got to create some mechanism, as least that's what I've done over the years to allow every child to pass; and then for those kids, really for those kids who get an 'A' in the class, ...they really have good, high test averages plus do all the other work. So for kids who are bright students, they can't just ace two tests and they're done. They have to produce all the other work that the other kids have to do. So the kid who earns an 'A' has really worked, I feel, has worked hard in my class to earn the 'A'. And a kid who maybe doesn't have as much ability but is willing to work is going to get at least a 'D', possibly higher" (rural, not using ability grouping, humanities).

"It really shows you how with just the right kind of attitude, just thinking a little bit differently, you can make things work" (rural, not using ability grouping, humanities).

"I'm seeing kids that have been previously in 5th and 6th grade tracked in low ability groups...I mean their self-esteem has just soared. I've never had a class before where I've done a manipulative lesson and the kids have actually gone to do a pencil and paper test or something and they're like 'cool'. The insight that the kids that catch on quicker provide to some of the kids that struggle is unbelievable. One example is, I put a word 'problem' on the board and we went to solve it and there were four different solutions. They all came up with the same answer and the kids were really freaked out. 'Well what is the right way to do it?' I said, 'What difference does it make?' And so it gave the kids an opportunity to see that there was more than one way to do this. And you don't always see that when you put a bunch of low level kids together. They're frustrated, their creativity seems to be stifled, they're afraid of making mistakes. You put that high level group of kids together and it's only one way and it's the teacher's way. So when you put them all together, it's just that sometimes there's a light that goes on....I'm constantly on my toes. I have to use different questioning strategies that maybe, maybe they can spit the answer right back to me but then I want to see can they apply it. 'Tell me in your own words.'

One example would be like I could put a typical division problem on the board and like suppose I have a lower level kid that needs to take out his multiplication chart and do it and that's OK, and then I have a middle level kid that struggles through it, and then I have a top

level kid that gets through it like that. What I may say to that kid is you did a good job now is there any different way we could have come up with that same answer. So while they're working away trying to come up with a different strategy, everything kinda falls into place. Then you can reward that by saying, 'You came up with a different strategy; why don't you show us'....Sometimes for middle level or for low level ability students, that's a better way for them to do it. Then there are other times when I've seen a low level kid take such a simplistic approach, get through a problem, and then a top level kid just struggles, struggles, struggles and gets frustrated and gives up, and then when that kid says to the other kid, 'Hey, look, you could have done it this way.' The sharing that goes on is pretty wonderful....Doing heterogeneous grouping, the best thing to do is a multi-muddle approach too. You have to do hands-on, you have to do visual, you have to do auditory. Because I'm not only talking about low, middle, and upper ability, you also gotta factor in learning disabilities because heterogeneous doesn't mean you pull kids out to the resource room. I also think it's real important that you get your specialist. You get your reading specialists, you get your special education teacher, you get your remedial math teacher and put them in the classroom and you don't do pull out programs....You really have to fundamentally change how you're operating in the classroom....You gotta be willing to give up and stop saying this is just my scopes and sequence" (rural, not using ability grouping, math/science).

"...And I think there has to be some different methods of grading, of evaluation. I think grading has to change along with the grouping, and a lot of people feel will it be teaching to the middle, will we not be teaching to the top, will we not be teaching to the bottom, we'll be teaching to the middle and that's not good. I picture myself teaching more to the top and hope that I don't lose the others. That's my other fear--that they do what they can within the framework of my teaching more to the top and that I'm able to identify that this is the ability this kid has and evaluate them on that basis. I think it'll make evaluation really tough, really tough, more subjective than it already is, and I hate the objective side of teaching. It's a scary one" (suburban, using ability grouping, humanities).

"Modification of the material of the type of activities that I ask. Some are more enriching than the others, and I grade them differently. I have to say and I guess that should maybe not be said but I do. If a kid is a second grade reader, I don't expect the same essay as a result of reading a Jack London story as I do from a kid who is reading at a high school level. I don't" (suburban, not using ability grouping, humanities).

"I am a very organized person. I can have different things for kids to go to when they are finished. I have spent a lot of my own money on cooperative learning tools and on math manipulatives" (urban, not using ability grouping, math/science).

R and E group teachers offered many ways to modify materials and curriculum. Using trade books of different reading abilities but of the same genre is suggested. Modifying homework, offering extra help to students, reducing testing, increasing the use of manipulatives, and effective questioning strategies also are recommended. The use of supplemental material and modifying grades to be more subjective and performance based also seems appropriate.

Having other teachers into classrooms to help teach seems to require a fundamental change in how teachers operate and a change in their attitude toward non-ability grouped instruction. They caution that there is no one way to teach but that instruction must address the auditory, visual, and kinesthetic needs of all students.

Process Learning. Lastly, three teachers mentioned process learning as one alternative grouping practice.

"It will force me to use whole language all the time. ...I think that it will force English teachers to do more whole language workshops, more reading/writing workshops, and less of the taught the old way I'm a traditional teacher. I was trained in the traditional way. I think that it would just force us to do things differently, teaching writing differently, teaching literature differently. There would be more independent work going on and less work with. I generally hand out a book and then we go through the book sometimes. Well, I have very, very different ways of teaching books, but it's a whole new ball of wax....We're also developing right now in the English department new

themes and it's a whole new way of teaching for me"
(suburban, using ability grouping, humanities).

The process learning classroom also seems effective in non-ability grouped situations. Reading and writing workshop classes where learning is individually based and students work together cooperatively are recommended. The process classroom is frequently found in language arts but can also be used in all other classes as well. It enables students to direct their learning with guidance from teachers. For educators who wish to change ability grouping practices, training in managing process classrooms seems appropriate.

Overwhelmingly, teachers identified cooperative learning groups and other group work as a major strategy addressing student needs. This can also mean grouping students by learning styles, or by the type of lesson to be taught. Central to this grouping arrangement are the adaptation of curriculum and materials and flexibility in scheduling.

Summary

Teachers were interviewed regarding their thoughts and ideas about ability grouping. Care was taken to talk with teachers of seventh grade students from urban, suburban, and rural settings. Teachers were selected to represent the humanities (language arts, social studies, etc.) and the areas of math/science. Teachers were divided into two groups

based on their wish to retain (R group) or eliminate ability grouping (E group).

Teachers were able to define ability grouping accurately. They offered thoughts and beliefs about education and dilemmas and questions about ability grouping.

Data are organized by four major categories: (1) students, (2) parents, (3) curriculum and instruction, and (4) teachers. Data are reported as advantages, disadvantages, and alternatives to ability grouping.

Teachers perceive that ability grouping enhances curriculum, instruction, and student learning. Many teachers believe that they will be able to cover more material, challenge all students, and not "hold back" any students. More advanced or top level students are a particular concern. Teachers believe that students can have their weaknesses remediated more easily in an ability grouped classroom. Discipline issues also seem to be contained. Behavior problems are often found in low level classrooms, therefore, these students are not in average or top level classes.

Teachers perceive that ability grouping is easier to teach than non-ability grouped classes. Ability grouping has been a standard for many years for many teachers. To change their instructional practices it probably will require training and moving away from old habits and ways of operating with seventh grade students.

Teachers identified many disadvantages of ability grouping. Some disadvantages also appeared to be advantages

as stated by others. One such issue was the development of students' self-concept. Generally, R group teachers generally believe that students would not be in unfair competition if ability grouping were used. E group teachers generally believe that non-ability grouped classes would better enhance the development of self-concept.

Students modeling each other's behavior, learning methodology and social skills seems to be limited in ability grouped classrooms. Teachers believe that labels and stigmas develop in ability grouped classes to the point where diversity is not appreciated and discriminatory practices may evolve.

Ability grouping does not usually work for low level and top students. Teachers find that low level students do not usually improve, and that top students may not develop a clear understanding of their school work in traditional classes. Teachers offer as evidence students who are misplaced in higher ability groups yet still learn to high levels.

Discipline seems to be greatly improved in non-ability grouped classrooms. It seems that providing relevant curriculum, modeling social behaviors, and eliminating negative influences help to alleviate negative behaviors.

Placement for ability grouping appears to be inaccurate. Even within ability grouped classes, diversity is great based on other criteria. Students may be placed because they are well-behaved or "good" students.

Teachers offer a variety of alternatives to ability grouping. Fundamentally changing curriculum and instructional practices is a possible key to this change. Teachers believe that merely changing the way students are grouped will probably not positively impact student learning. Cooperative learning and peer tutoring were offered as specific strategies to use. Individualized instruction, process learning, interdisciplinary units utilizing projects, and relevant experiences seem to also be effective.

To accomplish switching from ability grouping to non-ability grouped classrooms, teachers suggest many traditional staff development activities to accumulate the necessary information and skills they will need. Surprisingly, no trends were evident based on setting, gender, age or years of experience in teaching regarding any of the issues in this study.

C H A P T E R V
S U M M A R Y A N D C O N C L U S I O N S

Middle school students undergo a metamorphosis as they mature from children to adults. This transformation takes place at different times and rates for each individual, resulting in wide variations in young adolescents' social, emotional, intellectual, and physical development. These often extreme differences among students at the same grade level present a special challenge for middle school educators.

Although ability grouping is a common practice in middle schools, it has come under close scrutiny over the past few years. Several researchers strongly suggest that ability grouping as traditionally practiced is detrimental to many learners (Bryson & Bentley, 1980; George, 1988; Good & Marshall, 1983; Goodlad, 1983; 1984; Low, 1988; Merina, 1989; Noland & Taylor, 1986; Oakes, 1985; Slavin, 1986; Trimble & Sinclair, 1987)

Many middle school educators and curriculum planners have chosen to eliminate the use of ability grouping in classrooms; others have chosen not to. Why are some educators interested in changing ability grouping practices and others interested in maintaining the status quo? The reasoning of educators about the advantages and disadvantages of ability grouping is not always clear.

One can learn much from the insights of teachers. By listening to what they have to say, teachers' reasons for

supporting or not supporting ability grouping may become clear. Understanding why teachers continue to use a particular ability grouping practice may help us to understand the decisions they make about ability grouping a particular group of students.

In all middle schools, students are grouped in some manner. The crucial issue is not whether we group students but how we group students. In order for middle school teachers to move away from ability grouping, they must first change the way they think about it. The first step toward changing teachers' thinking about ability grouping is to understand how and why they think the way they do. If teachers' thoughts are unknown, it would be difficult, if not impossible, to eliminate ability grouping practices in middle schools.

The purpose of this study is to determine middle school teachers' thoughts on ability grouping. Specifically, this study identifies the reasons that teachers retain or eliminate ability grouping practices in their classrooms. This study also identifies educators who have eliminated ability grouping and describes the grouping practices they have implemented to meet the unique learning needs of young adolescents.

Educators must understand teachers' perceptions of ability grouping if they are to change those perceptions. Documenting teacher perceptions is the first step in this process. Creating conditions that might alter teachers'

thinking and help them to see plausible alternatives to ability grouping is the next step.

This study focused on teachers' perceptions of ability grouping. Data from thirty-one teachers were categorized through the use of qualitative research methodology. Significant perceptions of teachers were identified regarding ability grouping.

Data were collected and organized based on the research questions that guided this inquiry: (1) Teachers' perceptions of the advantages of and reasons to retain ability grouping; (2) Teachers' perceptions of the disadvantages of and reasons to eliminate ability grouping; and (3) Alternative grouping practices that teachers have used successfully to replace ability grouping. Data were analyzed holistically to identify general outcomes, and by type of school (urban, suburban, or rural) to identify more precise outcomes.

Teacher interviews took place in participant schools and ranged from twenty-one minutes to forty-four minutes. A survey was completed to collect information about each teacher. This helped the researcher to collect specific and relevant data. An interview guide structured the interviews, ensuring that similar questions were asked of all participants. Audiotapes were made during each interview. Transcriptions of the tapes yielded abundant findings, and when combined with survey information, produced the data.

Major findings for the three research questions are reported in this section. In addition, other significant conclusions are also reported and discussed.

Research Question One:

What Do Middle School Teachers Perceive to Be the Advantages of Ability Grouping?

Teachers perceive that the major advantages of ability grouping are those associated with curriculum and instruction. It is clear that both E and R group teachers hold these perceptions: (1) more learning will take place, (2) learning will be at a faster pace so that more material will be covered, and (3) students will be challenged more by using ability grouping in the schools.

These perceptions seem to be particularly true when teachers talk about "top" students and "low" students. According to these perceptions, "top" students in ability grouped classes will move ahead quickly, they will not be held back, they will challenge each other competitively, and they will be better prepared for high school and further academic studies.

"Low" students in ability grouped classes can be given the help they need, they will be able to move at a slower pace, and they will not be forced to compete unfairly with brighter students. For these reasons, some teachers perceive that "low" students' self-concept will be enhanced by ability grouping.

R group teachers have a difficult time understanding how effective learning can take place in a mixed ability class. They do not seem to know how to teach students who have a wide range of abilities. Statements such as "I'll have to teach to the middle and hope it will work out" are typical.

R group teachers acknowledge that different materials and resources are needed for different students. Ability grouping is an organizational structure that enables teachers to use different books and experiences for different levels of students.

Six teachers specifically mentioned ability grouping in relationship to mathematics instruction. Five of these six teachers were math teachers. Of the seven math teachers in the study, four wish to eliminate ability grouping and three wish to retain it. The R group teachers perceived that math is a sequential discipline and therefore conducive to ability grouped classes. If students learn math skills in a particular order, then students can be grouped together according to the level of math ability or skill.

The offerings of algebra and pre-algebra courses to middle school students was also perceived to be an ability grouping issue. These courses are often gateways to advanced study in high school and beyond. Starting these classes early in seventh grade allows for space in a student's high school schedule for more advanced study. Humanities and science teachers generally do not have these kinds of

courses at the middle level, and therefore do not encounter as much pressure to use ability grouping.

Additionally, humanities teachers do not view their subjects with the same rigidity that math teachers do. This may further explain why they are more willing to consider non-ability grouped classes. Six language arts teachers, five social studies teachers, one bilingual teacher and one foreign language teacher (thirteen total) wish to eliminate ability grouping. By contrast, only four language arts teachers, three social studies, and one guidance counselor (eight total) wish to retain ability grouping. No significant trends or conclusions are drawn from these data.

Class size for low and top group students was a perceived advantage of ability grouping identified by E group teachers. Small classes for "low" students allow for individualized attention, control of students, and appropriate remedial instruction. Larger numbers of students are grouped in "top" classes because they exhibit self-control and are motivated to learn. R group teachers did not mention class size, therefore, it must not be a perceived advantage for them.

One-third of the teachers (six R group teachers and five E group teachers) mentioned parents in their discussion of ability grouping. Parents are perceived to be supportive of ability grouping and, conversely, do not support teachers and schools that wish to change to non-ability grouped classes. The greatest influence seems to be exerted by parents of top-level students. These parents tend to

articulate their needs and understand how to advocate for changes in the educational system.

Teachers acknowledge parental influence regarding ability grouping. Teachers perceive that parents want quality education for their children and do not want them "held back". Educators who wish to change ability grouping practices should strongly solicit parental support. They need to effectively communicate with parents that non-ability grouped classes can also offer quality education and will not impede the educational progress of their children.

The perception of both R and E group teachers is that ability grouping is easier for the teacher. Having one textbook and a group of students with one ability is easier for a teacher than juggling a classroom with diverse students and many texts. Implicit in this belief is the notion of setting standards for classes and "pushing" students to meet or exceed these standards. Students who do not meet standards can easily move down to a lower group; conversely, students who exceed standards can move up a group. In either case, the teacher would not have to adjust curriculum and instruction within a particular class.

Teachers in both R and E groups mentioned how much fun it is to teach a "high" group. They also mentioned that teaching the low group often means teaching students with discipline problems; however, these problems would be limited to just one or two "low" classes.

Some R group teachers feel that recent discussions to eliminate or greatly reduce ability grouping is nothing more

than another trend in education. They wonder if further study and experience will reveal that ability grouping is an effective and appropriate way to teach, thereby confirming what they already believe. Utilizing this rationale, teachers may feel that they do not have to move away from ability grouping. All they have to do is wait, and teach the same way.

Teachers who support the use of ability grouping have deeply rooted personal beliefs and attitudes. These teachers said that ability grouping continues to be used because of the strong tradition of using this approach and because teachers have used this methodology for many years. Some suggested that this is how they were trained, so to teach a different way would be nearly impossible. R group teachers seem to ask rhetorical questions or make rhetorical statements such as these: "If it was effective then, why not now?" "I was taught this way and I turned out all right!"

R group teachers did not discuss socioeconomic or cultural segregation. They did talk in terms of helping students. R group teachers seemed to be insensitive to the potential discrimination associated with ability grouping.

In conclusion, more comments were addressed to the issue of curriculum and instruction in relationship to the advantages of ability grouping than any other category. Both R and E group teachers saw the advantages of ability grouping in this light.

Generally, teachers in both groups believe that ability grouping increases student learning. Teachers perceive that

ability grouping provides a more challenging and enriching curriculum for "top" students, and enables "low" students to receive the help they need. "Middle" or "average" students were not mentioned by R group teachers. This is interesting in light of the fact that most students are "average". Perhaps teachers have not thought about the impact of ability grouping on this large group of students. E group teachers frequently talk about the needs of all students, therefore, they included the middle or average group in their statements.

R and E group teachers state advantages of ability grouping that are consistent with teacher assumptions and concerns found in professional literature. Most of these perceived advantages, however, are not supported by research or effective practice. It appears that teachers do not have adequate information or they do not have confidence in research results.

R group teachers may not want to change for a variety of other reasons. Their belief structure may limit thinking or they may simply not want to invest the time, energy, and thought necessary to alter ability grouping practices. These ideas, coupled with the notion that teaching ability grouped classes is easier and change is difficult, form the basis for their perceived advantages of ability grouping.

Summary of Findings for Research Question One

Teachers' perceptions regarding the advantages of ability grouping centered upon curriculum and instructional

issues. This may be interpreted as stating that teachers perceive the advantages of ability grouping to be content-centered as opposed to student-centered. The perceptions about the disadvantages of ability grouping were far more student-centered and more concerned with the development of the whole child.

This seems to indicate that teachers who wish to retain ability grouping are more subject-centered and those who wish to eliminate ability grouping are more student-centered. This finding, coupled with the perception that teaching is easier in ability grouping classes, and more difficult in heterogeneous classes, provides a solid basis for understanding teachers' perceptions about ability grouping.

Research Question Two:

What Do Middle School Teachers Perceive to Be the Disadvantages of Ability Grouping?

Generally, teachers reported the disadvantages of ability grouping from a more holistic perspective. Disadvantages centered around students, their world, and their learning. When talking about the disadvantages of ability grouping, teachers in R and E groups discussed curriculum and instructional issues less frequently and seemed more concerned with the whole person and his/her development.

Both R and E group participants agree that expectations for learning, low student motivation in low groups, student

learning, inaccuracy of student placement, and student labeling are disadvantages of ability grouping. Teachers report that the lack of peer interactions and modeling of learning and behavior are serious disadvantages of ability grouping. Teachers indicated that there was much to be gained by having students work together and model to each other learning strategies which improve student learning and discipline.

Teachers stated the importance of students' self-concept development. Because the school assigns a student to a particular group, teachers and students make snap judgments about a person's capabilities based on the group level. This initial identification and label is reinforced by (1) the lack of movement out of assigned ability groups and (2) the sensitivity of the young adolescent as self-concept is forming. E group teachers feel that the combined effect of these two factors is harmful to many seventh grade students.

E group teachers believe that in non-ability grouped classes, "low" students would be exposed to a more stimulating and challenging curriculum. These teachers believe that these students will learn more in a non-ability grouped class. They perceive that "top" students will also benefit from reduced ability grouping for various reasons. R and E group teachers feel that they can help "top" students, as well as all other students, learn by developing higher-order thinking skills and developing appreciation and

understanding of others. These are skills that are perceived to benefit students throughout life.

Closely aligned with self-concept is students' satisfaction with school. If students do not like themselves, or do not like where they are placed, they will have difficulty enjoying or being satisfied with school. E group teachers believe that this is an important reason for not using ability grouping. R group teachers did not express thoughts about this issue.

Teachers feel that using ability grouping affords little opportunity for students to interact with each other and model their different behaviors and learning styles. By allowing students the opportunity to work together, everyone in the classroom will benefit. Teachers also believe that schools should reflect the realities of our society; ability grouping creates a false sense of the world.

E group teachers feel that ability grouping creates inaccurate labels and expectations. They reported that both teachers and students expect less from "low" students, and that they receive labels such as "retard" or "dummy". Conversely, "top" students are expected to know, understand, and comprehend large amounts of information; this expectation may also be unreasonable. Top students may develop labels as "nerds" or "brains" or think of themselves as superior or elite.

Teachers perceive that ability grouping results in relentless discipline problems in lower groups. They also acknowledge that students will behave well in the upper

groups. E group teachers who do not use ability grouping state that discipline problems diminish by having students together in a non-ability grouped environment. This is a result of students modeling appropriate behaviors and social skills. Teachers believe that students pressure their peers to behave appropriately in non-ability grouped classrooms.

An inability to place students accurately into ability groups is also a perceived disadvantage stated by both R and E teachers. This problem takes many forms. Some of the most frequently stated perceptions are: (1) within any classroom there are differences that must be addressed by teachers; (2) testing may not be an accurate measure of a student's ability, thus basing decisions on them is suspect; (3) poor students and minority students are over-represented in "low" groups, thus putting into question the objectivity of the selection process; and (4) students may be placed because of their behavior, both good and bad, not their ability; "good kids" tend to be in higher level groups.

Most teachers admitted the difficulty in accurately placing students in ability grouped classrooms. R group teachers did not discuss these issues. Perhaps they concede certain inaccuracies in student placement; however, they feel that a majority of students are appropriately placed. They tend to value certain academic criteria, such as reading or math ability, and seem not to consider the many other differences inherent in young adolescents.

Half the E group teachers stated that ability grouping does not accurately reflect our society. They feel that our

society is diverse and will become more so in the future. Diversity includes appearance, culture, behavior, learning style, and knowledge base. Teachers feel that schools must help students understand and work with a diverse group of peers so that differences become advantages, not disadvantages. Teachers feel that ability grouping separates student populations instead of bringing them together.

E group teachers stated that parents are important participants in decisions about ability grouping. They seemed to say two things at once: (1) that parents are interested in a challenging and competitive curriculum for their students and (2) that they would also be supportive of altering ability grouping practices if students were challenged. Both R and E group teachers perceive the importance and power of parents to influence decisions about ability grouping by either supporting ability grouping or supporting other grouping arrangements.

A key to improved learning in non-ability grouped classes is flexibility, training, and administrative support. It is clear that teachers perceive their proficiency in reducing ability grouping as an issue of professional development. E group teachers frequently mentioned reading and discussing pertinent research, and learning and developing new and appropriate instructional strategies. R group teachers infrequently discussed these issues.

Developing appropriate skills while holding high expectations of all students is perceived to be a powerful

combination. E group teachers believe that if you expect all students to achieve, they will! If you expect more able students to work with peers and learn to high levels, they will!

Both R and E group teachers believe that teaching a mixed ability classroom is more difficult. Teachers must manage different materials, assignments, curriculum, and classroom strategies. However, this juggling act can result in increased student learning and improved intellectual, social, and emotional development of young adolescents.

Personal reasons and beliefs about education enter into E group teachers' perceptions about the disadvantages of ability grouping. Because of their experience with ability grouped and non-ability grouped classes, their exploration of research and professional literature, and discussion with colleagues, E group teachers believe strongly in non-ability grouped classes. They feel that it is very important to reduce or eliminate ability grouping.

Summary of Findings for Research Question Two:

E group teachers have found ways to move beyond these perceptions. Perhaps their reward for their extra work is seeing the students achieve success in their non-ability grouped classes. E group teachers tend to measure success through academic, personal, social, and holistic measures.

E group teachers confront the disadvantages of non-ability grouped classes that R group teachers perceive. E group teachers believe that there must be a better way to

work with young adolescents than using ability grouping. They believe that they can learn how to manage a non-ability grouped classroom, or already know how to manage such a classroom.

Both R and E group teachers agree that placement of students in ability grouped classes is not accurate. There appears to be no one way to group students that is effective for all students. E group teachers suggest that flexible grouping based upon specific needs or skills is appropriate.

Research Question Three:

What Alternative Grouping Practices Do Middle School Teachers Utilize to Replace Ability Grouping?

Teachers agree that placing students in classrooms within flexible grouping arrangements is a reasonable alternative to ability grouping. These classrooms are characterized by cooperation and flexibility, with the teachers guiding the groups involved.

R and E group teachers think that cooperative learning can be effective when used in a non-ability grouped classroom. Other suggestions for more general kinds of group work were offered. Twenty of the thirty-one teachers perceive group work to be helpful. Peer tutoring was specifically mentioned as an alternative that works.

In addition to flexible grouping practices, adjusting curriculum and materials can enhance individualized learning. A "hands-on" relevant curriculum that captures

students' interest, and includes their thoughts and ideas, is perceived effective by many teachers.

Teachers perceive smaller class size, thematic and interdisciplinary instruction, and sufficient time to plan and develop lessons as vital components of successful non-ability grouped instruction. Classes with less than twenty-five students enable teachers to better manage a diverse group. Interdisciplinary instruction helps ensure the development of a relevant curriculum.

The use of a differentiated curriculum, best accomplished by using thematic integrated instruction and a variety of materials, books, manipulatives, and equipment, is also perceived as effective. This helps students learn in a variety of ways, which is especially important for young adolescents.

Teachers believe that process learning and individualized curriculum are helpful in teaching diverse groups. A process classroom is characterized by less emphasis on facts, and more emphasis on learning how to obtain information. Individual goals and evaluation, and small group lessons are also key.

Teachers believe that adopting a middle school ideology and organization can encourage the elimination of ability grouping. Middle schools are concerned with the uniqueness of each child. They are organized to provide caring and supportive learning environments through the use of interdisciplinary teaming and advisory groups. Middle school organization presupposes flexible scheduling and teacher

decision making. E group teachers believe that teaming, with its common team planning, team scheduling, common core of teachers and students, and flexible block of time schedules, will support the elimination of ability grouping practices.

Summary of Findings

Both R and E group teachers know the issues surrounding ability grouping. They talk about it in terms of their school, their students, and their community. Those who wish to retain ability grouping perceive that it works where they are, and that other forms of grouping will not work as well. R group teachers state nearly as many disadvantages of ability grouping as they do advantages. These perceptions are consistent for urban, suburban, and rural teachers.

E group teachers are more adamant in their perceptions. They state fewer advantages of ability grouping, and many times more disadvantages. They believe that non-ability grouped methods, coupled with other teaching methodologies, are effective ways to teach middle school students while promoting their personal growth.

Parents also seem to be important in the discussion of the perceptions of ability grouping. Teachers listen to or at least understand the power parents have in determining educational practice. Parents' perspectives of ability grouping will have an impact on grouping arrangements.

It is interesting to note that sixteen of seventeen teachers interested in eliminating ability grouping had

taught in both ability grouped and non-ability grouped classrooms. The opposite was true for the teachers who wished to retain ability grouping. Only one of the fourteen R group teachers had taught both ability grouped and non-ability grouped classes. This seems to suggest that to be supportive of eliminating ability grouping in classrooms, teachers must have used both types of instruction.

Educators who wish to reduce ability grouping practices in schools may want to consider these findings. Administrators in public schools should find ways to have teachers experiment with and utilize non-ability grouped classrooms. Teacher educators should find practicum placements where non-ability grouping is practiced. This experience seems to be necessary for potential teachers to think differently about ability grouping.

While the diversity of students in urban schools is usually greater than in suburban and rural schools, E group urban educators held equally optimistic views about non-ability grouped classes and thought urban schools could successfully eliminate ability grouping. Urban educators frequently said their environments are more diversified than rural or suburban schools. Nevertheless, they are eager to find ways to work with students of all abilities within one classroom. They see this as possible and productive.

This does not suggest that great numbers of urban educators are eager to explore alternatives to ability grouping than suburban or rural educators, but many are. Perhaps, teachers in urban schools see more clearly the

deleterious effects of ability grouping and more beneficial outcomes of not using ability grouping.

Implications

Three assumptions guided this study: (1) Elimination of ability grouping practices requires a change in teacher behavior in the classroom; (2) The process of eliminating ability grouping practices is complex, personal, and often difficult; (3) While the process of eliminating ability grouping practices is personal and individualized, it cannot be accomplished in isolation. Altering rigid ability grouping practices requires educators to be part of a group effort (a team, a grade level, or a school).

An analysis of data suggests that teachers in this study appear to hold these assumptions. Ability grouping, as practiced in schools included in this study, is a long-held tradition and educational practice. For educators to change from ability grouping, they will need clarify and understand their thoughts and perceptions of ability grouping.

Teachers who support ability grouping do not for the most part, believe what they read and hear about ability grouping. If they believe what they read and hear, they do not think it applies to them, in their schools! For them, ability grouping may not be the best way to work with young adolescents in schools, but it works reasonably well and they do not believe another way of grouping is worth the effort, or works any better.

They believe that ability grouping works for the "top" students, and changing this practice would be doing a disservice to these students. Teachers believe that they can cover more material faster with these "top" students. They also believe that parents of "top" students demand this kind of learning environment for their sons and daughters because they perceive it to provide high quality learning.

Teachers who support ability grouping also believe that it works better for "low" ability students. It allows for a slower pace and more individual attention, and the isolation of discipline problems. They also believe that teaching in an ability grouped class is easier.

It is likely that to effectively change ability grouping practices, teachers will have to change their thinking. For this change to take place, strong evidence must be gathered that demonstrates a significant need to alter ability grouping practices at the individual school site and in the individual teacher's classroom. This may be best accomplished by directly involving teachers in non-ability grouped classes. They should be active participants in action research to ensure that data will be meaningful to them. Administrators can provide time, resources, and encouragement to assist these efforts.

Teachers who have chosen to eliminate ability grouping in their schools and classrooms have bridged the gap between acceptance of the status quo and taking action. Their actions are based upon a strong belief that they can be

successful, and benefit all students, both academically and socially.

These teachers have participated in schoolwide discussions and studies exploring the issues of ability grouping. They have taken advantage of professional development opportunities. They have tried to implement promising classroom strategies, and have shared their thoughts, ideas, failures, successes, and frustrations with colleagues. R group teachers did not indicate that they have had these kinds of professional development opportunities, therefore these activities may be significant motivators to eliminate ability grouping.

Reasons to change to non-ability grouped classes are varied and often both personal and professional. Educators within school environments must be able to respond to the many factors that motivate teachers to change.

Recommendations

The data in this study are rich with recommendations to eliminate ability grouping practices in middle schools. Findings from this study point to several important directions to improve public education for young adolescents. Both R and E group teachers offered keen insights into the complexities of this fundamental educational change. Educators must view finding in this study carefully and examine their own settings for directions for improvement.

Recommendations for Public Schools

For schools to reduce ability grouping it seems likely that (1) the professional development of teachers is a key to changing teacher attitudes; (2) exposure to teaching students with different abilities within the same classroom offers an invaluable experience to teachers; and (3) educators must cultivate teachers who are more student-centered and less subject-centered, and who understand the needs of young adolescent students.

Educators who are interested in changing ability grouping practices for seventh grade students can experiment with using different grouping practices. The focus of these experiments should center on students' needs and content acquisition.

Teachers who want to retain ability grouping and teachers who want to eliminate ability grouping should communicate their concerns and beliefs with each other. This communication can be within schools, within districts, or across schools and districts. The common ground is the education of students.

Time must be provided for the conversation to take place. Study groups, conferences, faculty meetings, professional days, conversations over coffee, and early release days are a few suggestions. Professional literature provide a basis for discussion and knowledge acquisition.

Action research in schools by those involved will provide data specific to that school and those students.

Research could address the many issues raised in the professional literature, or issues raised by teachers and parents. The results would provide the data necessary to make an informed decision.

Teachers will find it necessary to develop new skills. Training will be needed and "permission" to experiment with new strategies will be needed. Specific training in cooperative learning, process learning, "hands-on" learning, and peer tutoring would be helpful. Coupled with curriculum changes, these training sessions will provide the tools necessary for teachers to restock their teaching toolboxes. As teachers learn new skills, they should experiment with non-ability grouped classrooms over an extended period of time. They will need to discuss, share, and evaluate the effectiveness of their efforts.

Teachers can change their behaviors in classrooms. Many staff development opportunities can be offered which assist teachers in changing their behaviors in order to be successful in non-ability grouped classes. Research and practice suggest that this change can be successful.

The voice of students and parents should also be heard during this period. Discussions, surveys, and hearings are but a few ways for students to participate in this evaluation. Parents can become involved by serving on committees, doing research, compiling survey results, and volunteering in the classroom.

Finally, moving to a middle school ideology and organization seems to encourage the elimination of ability

grouping. The pieces of the middle school pie that lead to this change are: (1) the philosophical base necessary to understand the students served, (2) teaming the same teachers and students together, (3) scheduling that allows for teachers to have common time, (4) schedules which teachers can change without affecting other teams, (5) advisory time to better know each student individually, and (6) schedules that allow teachers to plan integrated or interdisciplinary curriculum.

Recommendations for Higher Education

This study suggests that educators, in higher education, should ensure that new teachers think carefully about how students learn and how they, as prospective teachers, could alter their own behavior to create environments to enhance learning for students. It seems important that new teachers seek clarity to the problems students have with learning. Understanding the problems gives direction for solving the problems. There are no quick fixes or predetermined programs that will solve complex problems. This is important for teachers to understand.

This study suggests that teachers who have thought carefully about ability grouping seem to be able to determine that there are various ways to group or cluster students to enhance their learning. If new teachers knew how students learn, they might also understand that ability grouping is not a panacea for enhancing student learning.

If teachers have carefully considered their thoughts and perceptions about student learning, understand current research regarding ability grouping, and the advantages and disadvantages of ability grouping, then they presumably will need to develop the skills necessary to create dynamic learning environments. Teachers may become knowledgeable of cooperative learning, integrated curriculum, and other identified strategies for addressing individual differences, but teachers must look internally to discover and develop the tools necessary to create effective classroom environments and reduce the need for ability grouped classrooms. Perhaps teachers who are student-centered and not only content-centered will develop into educators who view ability grouping as unnecessary.

Colleges and universities that prepare students should carefully consider placing students in practice teaching situations where cooperating teachers are thoughtful of student learning problems and have skills in leading classrooms where students are grouped in many ways. Prospective educators should graduate with an ability to bring clarity to student learning problems as well as the strength to practice creative intelligence so that diverse student populations will be served within the classroom.

Suggestions for Further Research

It is suggested that this study be replicated in order to enhance reliability and expand the findings. This will

further establish the knowledge base regarding how teachers perceive ability grouping and their thoughts about ability grouping. Through this knowledge educators might gain insights that help others to realize that there are many compelling ways to group young adolescents for learning.

Further research should examine the seemingly powerful impact of personal experience in the acceptance or rejection of ability grouping by teachers. This research could focus on establishing possible links between teachers' personal experience and the ways that they create environments that increase student learning.

Further research should investigate the perceptions of math and science teachers about ability grouping. Often these subject area teachers are advocates of ability grouping in their classrooms. Perhaps this study could be replicated with math and science teachers so that educators could better understand the thoughts and perceptions guiding their behavior.

Further research is needed regarding the role of parents in determining ability grouping in classrooms. How much influence do parents have regarding decisions about ability grouping? Have schools that have altered ability grouping practices involved parents to gain their support, and if so, how did they do it? These questions may guide additional research.

Further research should investigate teachers' willingness to change from ability grouping to alternative ways of grouping young adolescents. If teachers understood

the existing research base on ability grouping and its impact on child development and learning, would this change teachers thoughts? Would action research in classrooms cause teachers to think differently about ability grouping? These may be important questions that may enable teachers to change to non-ability grouped classes.

Research is needed on the role of middle school in reducing ability grouping practices for young adolescents. Do the philosophical and organizational components of a middle school enable educators to create conditions that allow for the reduction of ability grouping? This question may guide additional research.

Conclusion

The findings in this study shed light on the thought process of teachers regarding ability grouping. It shows that most of the teachers interviewed were knowledgeable about the advantages and disadvantages of ability grouping through experience or professional development. Despite this fact, some teachers refuse to change their ability grouping practices.

By comparing the thoughts of teachers who want to eliminate ability grouping with those who wish to retain ability grouping, greater understanding of the complexities associated with this issue might take place. Having this knowledge and understanding may be helpful to those who wish to change ability grouping practices in public schools, and

armed with this knowledge, teachers may be able to overcome the forces that perpetuate ability grouping. Educators could then develop non-ability grouped classrooms and eliminate the deleterious effects of ability grouping. Most importantly, all students would have the opportunity to learn to high levels and not be excluded or limited by inappropriate grouping practices in schools.

A P P E N D I C E S

APPENDIX A
LETTER TO PRINCIPALS

Date

x
x
x
x

Dear x

I am Bob Spear, a middle school principal and past president of the New England League of Middle Schools and a student at the University of Massachusetts in Amherst, MA I am conducting research in partial fulfillment of my doctoral work at the University. I need your help!

I am writing to several middle level schools to see if seventh-grade teachers will participate in my study. This study will help discover why educators do or do not want to eliminate ability grouping practices in their classrooms.

I am interviewing seventh-grade teachers who use or do not use ability grouping. The reason for my inquiry is to gain insights about educational change from the teachers' perspective. More specifically, I am examining how teachers feel about the altering of ability grouping practices and its impact on the classroom.

The central focus of this study evolves around three research questions:

- (1) What perceptions do middle school teachers report about the disadvantages of ability grouping?
- (2) What perceptions do middle school teachers report about the advantages of ability grouping?
- (3) What alternative grouping practices do middle school teachers use to replace ability grouping?

Are you interested? I hope that you are! I have clearly delineated the responsibilities so that you can better decide if you want to help with this inquiry. I have also included a description of this project so that you will have greater understanding of the intent of this study.

Thanks for your interest in this study!

Sincerely,

Robert C. Spear

Project Description

Although ability grouping is a practice commonly found in middle schools, it has come under scrutiny over the past few years. Several researchers strongly suggest that ability grouping as traditionally practiced is detrimental to many learners (Bryson & Bentley, 1980; George, 1988; Good & Marshall, 1983; Goodlad, 1984; Low, 1988; Merina, 1989; Noland & Taylor, 1986; Oakes, 1985; Slavin 1986; Trimble & Sinclair, 1987).

In all middle schools students are grouped in some manner. The crucial issue is not whether we group students but how we group students. Moving to a more heterogeneous grouping of students requires teachers to make tremendous individual changes. Teachers must alter their behaviors in the classroom and must be the major participants in the decision to alter ability grouping practices.

Many middle level educators and curriculum planners have chosen to eliminate the use of ability grouping in classrooms; others have chosen not to. Why are some educators interested in changing ability grouping practices and others interested in maintaining the status quo? The reasoning of educators about the advantages and disadvantages of ability grouping is not always clear.

The insights of teachers can be understood. Through insights, a teacher's reasons for supporting or not supporting ability grouping can be understood. If there is an understanding of the reasons teachers continue to use a particular ability grouping practice, the thoughts of teachers about ability grouping will also be known.

The purpose of this study is to determine middle school teachers' thoughts toward ability grouping. Specifically, this study will address the reasons that teachers maintain or eliminate ability grouping practices. Further, this study will identify educators who have eliminated ability grouping and will describe the grouping practices they have used to replace ability grouping in order to positively affect student learning and to meet the unique needs of young adolescents.

By gaining insights into teachers' perceptions of the advantages or disadvantages of grouping practices, knowledge will be acquired about what teachers think relative to this issue.

The following definitions are used:

Grouping refers to the many ways educators may want to organize for instruction.

Ability grouping refers to a clustering of students who have some common perceived ability.

Tracking is a form of ability grouping and is a method whereby students are grouped together and stay together for an extended time: a semester, a year, or a school career.

Middle schools create programs and activities to meet the particular needs of young adolescents. Consideration is given to the social, emotional, intellectual, and physical needs of the students served.

Interviewing will be used because it is compatible with the intent and design of this study. Purposeful sampling will be used. The intent of such sampling is to select "rich" sources that will yield abundant and pertinent information on teachers' thoughts and perceptions of ability grouping.

The selection of teachers in seventh grade will be based upon the following criteria: (1) willingness to participate; (2) diversity of middle schools in size, student population, and setting (rural, urban, and suburban); (3) teachers and school sites that are perceived to provide rich information toward the purpose of this study; and (4) the degree of elimination of ability grouping practices (50% who have eliminated ability grouping, and 50% who have not eliminated ability grouping practices).

Responsibilities of the Principal

I am asking that you or guidance personnel ask teachers if they wish to participate in this study. If you and the teachers are willing to participate, the enclosed school survey is to be completed by you and returned. The information contained on the survey will guide me to select schools for this study. If, after receiving the survey, I need clarification about any of the information, a telephone interview will be conducted.

Teachers from the seventh grade in your school will compose part of the sample. Teachers will be selected to represent the areas of math/science and the humanities. If more than five seventh grade teachers are on staff, you or a designee will be contacted to assist in determining the teachers best suited for this study.

An interview guide will help direct the individual interview to insure that relevant topics are explored with all participants. It is important that all persons interviewed respond with their own personal perspectives. The guide will focus the interview and help insure its completion in a timely manner.

All interviews will be tape-recorded and transcribed. Field notes will be taken after each interview to note any unusual situation occurring within the setting or the interview.

To help insure reliability of this study, a follow-up phone interview will be conducted by an assistant. Data collected from this interview will be compared with data collected in the on-site interviews.

I envision that I will need one day in your school. I will pay for a substitute to cover the 5 seventh grade teachers for one 40- to 50-minute period each. I will ask that you, as principal, (1) obtain this substitute, (2) schedule the day (both for the interview and the observation), and (3) provide a reasonably quiet environment for the interview.

Please contact your teachers to see if they are willing to participate. If they are, please fill out the enclosed questionnaire as soon as possible and return it to me in the envelope enclosed.

Summary of Responsibilities

1. Ask teachers if they wish to participate.
(four to six volunteer teachers representing each of the major subject areas)

2. Complete the enclosed survey.

If selected:

3. Schedule day for interview.
4. Obtain substitute.
5. Develop day-long schedule.
6. Secure a reasonably quiet interview area.

APPENDIX B
LETTER TO TEACHERS

date

x
x
x

Dear Middle School Colleague:

I am Bob Spear, a middle level educator and a student at the University of Massachusetts in Amherst, MA. I am conducting research in partial fulfillment of my doctoral work at the University. I need your help!

I am writing to several seventh grade middle level teachers to request their participation in my study. This study will help discover why educators do or do not want to eliminate ability grouping practices in their classrooms.

I am interviewing seventh grade teachers who use or do not use ability grouping. The reason for my inquiry is to gain insights about educational change from the teachers' perspective. More specifically, I am examining how teachers feel about the altering of ability grouping practices and its impact on the classroom.

The central focus of this study evolves around three research questions:

- (1) What perceptions do middle school teachers report about the disadvantages of ability grouping?
- (2) What perceptions do middle school teachers report about the advantages of ability grouping?
- (3) What alternative grouping practices do middle school teachers utilize to replace ability grouping?

Are you interested? I hope that you are! I have clearly delineated the responsibilities so that you can better decide if you want to help with this inquiry. I have also included a description of this project so that you will have greater understanding of the intent of this study.

Project Description

Although ability grouping is a practice commonly found in middle schools, it has come under scrutiny over the past few years. Many middle level educators and curriculum planners have chosen to eliminate the use of ability grouping in classrooms; other have chosen not to. Why are some educators interested in changing ability grouping practices and others interested in maintaining the status quo? The reasoning of educators about the advantages and disadvantages of ability grouping is not always clear.

The purpose of this study is to determine middle school teachers' thoughts about ability grouping. Specifically, this study will address the reasons that teachers maintain or eliminate ability grouping practices. Further, this study will identify educators who have eliminated ability grouping and will describe the grouping practices they have used to replace ability grouping in order to positively affect student learning and to meet the unique needs of young adolescents.

By gaining insights into teachers' perceptions of the advantages or disadvantages of grouping practices, knowledge will be acquired about what teachers think relative to this issue.

The following definitions are used:

Grouping refers to the many ways educators may want to organize for instruction.

Ability grouping refers to a clustering of students who have some common perceived ability.

Tracking is a form of ability grouping and is a method whereby students are grouped together and stay together for an extended time: a semester, a year, or a school career.

Middle schools create programs and activities to meet the particular needs of young adolescents. Consideration is given to the social, emotional, intellectual, and physical needs of the students served.

Interviewing will be used because it is compatible with the intent and design of this study. The selection of teachers in seventh grade will be based upon the following criteria: (1) willingness to participate; (2) diversity of middle schools in size, student population, and setting (rural, urban, and suburban); (3) teachers and school sites that are perceived to provide rich information toward the purpose of this study; and (4) the degree of elimination of ability grouping practices (50% who have eliminated ability grouping, and 50% who have not eliminated ability grouping practices).

Responsibilities of Teachers

Teachers from the seventh grade in your school will compose part of the sample. Teachers will be selected to represent the areas of math/science and the humanities. If you are interested please inform your principal today!

An interview guide will help direct the individual interview to insure that relevant topics are explored with all participants. It is important that all persons interviewed respond with their own personal perspectives. The guide will focus the interview and help insure its completion in a timely manner.

All interviews will be tape-recorded and transcribed. Field notes will be taken after each interview to note any unusual situation occurring within the setting or the interview.

To help insure reliability of this study, a "member check" will be done. After all transcriptions of interviews are completed, the transcriptions will be sent to you. You will be asked to read the transcriptions and comment in writing about the content accuracy of the documents. This procedure answers questions about the accuracy of recordings and transcriptions relative to your main points and essential ideas. Any suggested corrections will be compared to the original tape recording, and, if necessary, changes will be made.

I envision that I will need forty minutes of your time in your school. If five seventh grade teachers participate, I will pay for a substitute for the day (unless other arrangements can be made). I will ask that you (1) prepare your class for a substitute, and (2) meet me promptly at the designated time and place for the interview.

Please contact your principal today if you are willing to participate.

Summary of Responsibilities

1. Express your willingness to participate.

If selected:

2. Prepare your class for a substitute for a forty minute period.
3. Please be prompt for the interview.

Thanks for considering this study!

Sincerely,

Robert C. Spear

APPENDIX C
SITE SELECTION SURVEY

TEACHER PERCEPTIONS OF ABILITY GROUPING PRACTICES
in
MIDDLE SCHOOLS

SITE SELECTION SURVEY

(Please complete and return this survey by May 18, 1992)

Data

School Name: _____ Date: _____

Person Completing This Form: _____

School Address: _____

School Phone Number: _____

Number of Students: _____ Type of Community: _____
(rural, suburban, urban)

Average Cost Per Student (Approx 1991): _____

VI. Please enclose a document that describes the rationale for educational practices in your school. (This may be a copy of the school's stated philosophy, mission statement, or the introductory comments from the student or teacher handbook.)

Send the survey in the self-addressed envelope to:

Robert C. Spear
P.O. Box 769
Southwick, MA 01077

Thank you very much for your prompt attention to this matter. I will be in contact with you as soon as possible. I appreciate your efforts on my behalf.

APPENDIX D
INTERVIEW INFORMATION AND PERMISSION

Participant

Date

Interview Information and Permission

I am Robert C. Spear, a student at the University of Massachusetts in Amherst, MA. I am conducting research in partial fulfillment of my doctoral work at the University.

I am talking with a number of middle level educators to find out why they do or do not want to eliminate ability grouping practices. The objectives that guide my work are:

Objective 1: What do middle school teachers report as the reasons that they want to eliminate ability grouping practices?

Objective 2: What do middle school teachers report as the reasons that they want to continue using ability grouping practices?

Objective 3: What alternative grouping practices do middle school teachers utilize to replace ability grouping?

I am interviewing seventh-grade teachers who use ability grouping and those who do not use ability grouping.

The reason for my inquiry is to gain insights into educational change from the teacher's perspective. More specifically, I would like to examine how teachers feel about changing ability grouping practices and the impact of such changes on the classroom. My intent is not to seek answers to these questions but to stimulate discussion of your stories and to recreate your experiences within the framework established.

You are being asked to participate in this study. I would like to conduct a thirty-five minute interview with you. I will be asking you to reflect upon your experience and to describe your feelings and thoughts relative to ability grouping.

The interviews will be audiotaped and then transcribed. My goal is to analyze the material for my work. Analysis of the contents of the interviews includes the possible use of extensive quotations and/or the development of a personal profile. A possibility exists that some of the material will be used in educational presentations and journal articles.

In all written materials and presentations, I will not use your name or any other names you mention in your interview. The name of your school will not be used. Your identity will be protected.

APPENDIX E
INTERVIEW GUIDE

Start Time _____

INTERVIEW GUIDE

For the purpose of this interview will you state your name and the school where you teach:

Name: _____ School: _____

How long have you taught and what grade levels have you taught?

What subjects have you taught and what subject(s) are you teaching now?

How long have you been in this school?

* * * * *

The first part of this interview we are going to talk about ability grouping; and in the second part, I am going to be asking for your opinions.

Much of our conversation today is talking about ability grouping. It would be helpful to understand what you think the term "ability grouping" means. What is your definition of ability grouping? How would you define the term "ability grouping"?

What has your experience been using ability grouping in seventh grade?

Key Question:

What do you think are the major advantages and/or disadvantages of ability grouping?

advantages:

disadvantages:

Are there any other advantages or disadvantages of ability grouping that you see?

Questions to Stimulate Discussion:

Within education, there has been much attention paid to the issue of ability grouping. You can hardly pick up a professional journal and not read something about it, or not hear conversation about it in the teachers' room. Why do you think ability grouping has received so much attention?

What do you think are the reasons educators state to support or not support ability grouping?

How have your perceptions of ability grouping changed since you entered education?

Why did they change?

Key Question:

In your opinion, should ability grouping be eliminated or retained in middle schools?

eliminated 1 2 3 4 5 6 retained

(If number circled is a 3 or 4, use this situation.)

I would like to describe a situation to you. How would you react to it?

Over the last year, there has been much debate within the community about the use of ability grouping. The individuals opposed to ability grouping state that it is an unfair educational practice that divides students and does not value the diversity of the individual. They also state that the practice of ability grouping limits access to programs and teaching methodologies proven effective for all students.

The individuals who want to retain ability grouping practices seem to be saying that with the wide difference in students' ability, background, skills, and behavior, students need to be grouped by ability. This enables teachers to teach to a level which more closely matches the students.

You are a seventh grade teacher in the Community Middle School. Staff development opportunities have taken place to help faculty become aware of issues surrounding ability grouping. The principal has suggested that teachers on teams should decide how to group students. You are on a seventh grade team of four teachers. Your opinion will be valued by your peers. What position will you take regarding this issue.

(go to appropriate question guide)

If the belief is that ability grouping should be eliminated:

Key Question:

Why do you believe that ability grouping should be eliminated?

What factors do you believe influenced your beliefs about ability grouping?

Who was involved in making the decision to change ability grouping practice?

Who should have been involved in making the decision to change ability grouping practice?

Key Question:

What alternative grouping practices did you utilize to replace ability grouping?

Have (Has) these (this) been successful? Why, or why not?

What professional development opportunities, if any, helped you change your perceptions about ability grouping?

You have been very helpful. Are there other thoughts, feelings, or perceptions you would like to share with me to help me understand your thoughts about ability grouping?

Finish Time: _____

If the belief is that ability grouping should be retained:

Key Question:

Why do you believe ability grouping should be retained?

What influences your decision to continue to use ability grouping?

What, if anything, would alter your perception of the effectiveness of ability grouping?

Under what circumstances would you change your ability grouping practices?

How would you need to change your classroom practices?

You have been very helpful. Are there other thoughts, feelings, or perceptions you would like to share with me so that I may better understand your thoughts about ability grouping?

Finish Time: _____

APPENDIX F
LETTER TO COLLEAGUES

Date

Address

x

x

x

Dear Colleague:

Thank you for agreeing to assist with my dissertation. Your expertise as a (teacher, administrator, researcher) is portentous to this study. The title of my work is Teacher Perceptions of Ability Grouping Practices in Middle Schools. I have interviewed thirty-one educators from rural, suburban, and urban schools. Seventeen wish to eliminate ability grouping practices and fourteen wish to retain ability grouping.

The research methodology I have chosen requires that transcripts be reviewed, and differences in teacher thoughts, beliefs, and perceptions between each group of teachers identified and categorized.

To help ensure content validity your help is requested. Enclosed you will find copies of two transcripts. I have identified, what I believe, are key perceptions of teachers germane to ability grouping. I have also indicated the categories that emerged from the data.

Would you please (1) read each transcription (2) identify what you believe are key perceptions of this teacher (3) categorize your perceptions (4) compare your findings with what I have identified, and (5) indicate any differences.

Please send your comments to me via the stamped, self-addressed envelope enclosed. Feel free to call if you have any questions. Thank you for your time and effort. Your expertise is essential to my research.

Sincerely,

Robert C. Spear

BIBLIOGRAPHY

- Alexander, K., & McDill, E. L. (1976). Selection and allocation within schools: Some causes and consequences of curriculum. American Sociological Review, 41, 963-980.
- Alexander, W., Arth, A. A., Cherry, C., Eichorn, D., Toepfer, C., Vars, G., & Lounsbury, J. (1982). This we believe. Macon, GA: National Middle School Association.
- Alexander, W. M., & George, P. S. (1981). The exemplary middle school. NY: Holt, Rinehart & Winston.
- Alexander, W. M., & McEwin, C. K. (1989). Schools in the middle: Status and progress. Columbus, OH: National Middle School Association.
- Allan, S. D. (1991, March). Ability grouping research reviews: What do they say about grouping and the gifted? Educational Leadership, 48 (6), 60-65.
- Anyon, J. (1981). Elementary schooling and distinctions of social class. Interchange, 12, 118-132.
- Armor, D., Conry-Oseguera, P., Cox, M., King, N., McDonnell, L., Pascel, A., Pauley, E., & Zellman, G. (1976). Analysis of the school preferred reading program in selected Los Angeles minority schools. (R-2007-LAUSD). Santa Monica, CA: The Rand Corporation.
- Arth, A. A., Johnston, J. H., Lounsbury, J. H., Toepfer, C. F., & Melton, G. E. (1986). An agenda for excellence at the middle level. Reston VA.: NASSP.
- Ashton, P. T., & Webb R. B. (1986). Making a difference: Teachers' sense of efficacy and student achievement. New York: Longman.
- Ashton, P. T., Webb, R. B., & Doda, N. (1983). A study of teachers sense of efficacy. Gainesville, FL: Florida University.
- Axline, V. M. (1947). Nondirective therapy for poor readers. Journal of Consulting Psychology, (11), 61-69.
- Barber, P. J., & Legge, D. (1976). Perception and information. A4 (P. Herriot, General Editor) (Essential Psychology). London, England: Methuen & Co., Ltd.
- Barth, R. S. (1990, March). A personal vision of a good school. Phi Delta Kappan, 71 (7), 512-516.
- Bartley, S. H. (1958). Principals of perception. New York: Harper & Brothers.

- Bartley, S. H. (1969). Principals of perception, 2nd Edition. New York: Harper & Row.
- Becker, H. J. (1990, February). Curriculum and instruction in the middle grade schools. Phi Delta Kappan, 71 (6), 450-457.
- Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1986). Women's ways of knowing: The development of self, voice and mind. New York: Basic Books.
- Bennett, H. Z. (1987). The lens of perception. Berkeley, CA: Celestial Arts.
- Berman, P., Greenwood, P. W., Pincus, J., & Mclaughlin, M. W. (1975, April). Federal programs supporting educational change, Vol. IV: A summary of the findings in review. Santa Monica, CA: The Rand Corporation.
- Berman, P., McLaughlin, M., Bass, G., Pauly, E., & Zellman, G. (1977). Federal programs supporting educational change, Vol. 7: Factors affecting implementation and continuation. Santa Monica, CA: The Rand Corporation.
- Bernagozzi, T. (1988). One teacher's approach. Learning, 17 (7), 39-43.
- Bevan, W. (1958). Perception: An evaluation of a concept. Psychological Review, 55 34-55.
- Blake, R. R., & Ramsey, G. V. (1951). Perception: An approach to personality. New York: Ronald.
- Boring, E. G. (1970). Ambiguous figure 1930. R. L. Gregory, (Ed.) The intelligent eye. New York: McGraw Hill Book Company.
- Braddock, J. H. II. (1990). Tracking the middle grades: National patterns of grouping for instruction. Phi Delta Kappan, 71 (6), 445-449.
- Brookover, W., Beady, C., Flood, P., Schweitzer, J., & Wisenbaker, J. (1979). School social systems and student achievement: Schools can make a difference. New York: Praeger.
- Brophy, J. E. (1983). Research on the self-fulfilling prophecy and teacher expectations. Journal of Educational Psychology, 75, 631-661.
- Brophy, J. E., & Evertson, C. (1977). Teacher behaviors and student learning in second and third grades. In Borich (Ed.), The appraisal of teaching: Concepts and process. pp. 79-95. Reading, MA: Addison-Wesley.

- Brophy, J. E., & Good, T. (1974). Teacher student relationships: Causes and consequences. New York: Holt, Rinehart, & Winston.
- Bryson, J. E., & Bentley, C. P. (1980). Ability grouping of public school students: Legal aspects of classification and tracking methods. Charlottesville, VA: The Michie Company.
- Burden, P. R. (1982, February). Developmental supervision: Reducing teacher stress at different career stages. Paper presented at the Association of Teacher Educators Annual Conference, Phoenix, Arizona.
- Burke, P. J., Christensen, J. C., Fessler, R., McDonnell, J. H., & Price, J. R. The teacher career cycle: Model development and research report. Washington, DC.
- Canfield, J., & Wells, H. C. (1976). 100 Ways to enhance self-concept in the classroom. Englewood Cliffs, NJ: Prentice-Hall.
- Capelluti, J., & Eberson, J. (1990). Change in education: strategies for improving middle level schools. Rowley, MA: New England League Of Middle Schools.
- Carnegie Council on Adolescent Development, (1989). Turning points: Preparing American youth for the 21st century. Washington D.C.: Carnegie Corporation.
- Cazden, C. B., & Mehan, H. (1989). Principles from sociology and anthropology: Context, code, classroom, and culture. In M. C. Reynolds (Ed.), Knowledge base for the beginning teacher. Oxford, England: Pergamon Press, pp. 47-57.
- Collins, J. (1986). Differential instruction in reading groups. In J. Cook-Gumperz (Ed.), The social construction of literacy. Cambridge, MA: Cambridge University, pp. 117-137.
- Combs, A. W. (1988, February). New assumptions for educational reform. Educational Leadership, 45 (5), 38-40.
- Combs, A. W., & Avila, D. L. (1983). Helping relationships: Basic concepts for the helping professions (Third Edition). Boston, MA: Allyn & Bacon.
- Combs, A. W., Avila, D. L., & Purkey, W. W. (1978). Helping relationships: Basic concepts for the helping professions (Second Edition). Boston, MA: Allyn & Bacon.

- Combs, A. W., Richards, A. C., & Richards, F. (1976). Perceptual psychology: A human approach to the study of persons. New York: Harper and Row.
- Combs, A. W., & Snygg, D. (1959). Individual behavior: A perceptual approach to behavior. New York: Harper & Row
- Converse, J. M., & Presser, S. (1986). Survey questions: handcrafting the standardized questionnaire. (Quantitative Applications in the Social Sciences). Newbury Park, CA: Sage Publications.
- Daniels, J. C. (1961). The effects of streaming in their primary school: I. What teachers believe. II. Comparison of streamed and unstreamed schools. British Journal of Educational Psychology, 78, 69-78; 119-126.
- Dember, W. N., & Jenkins, J. (1970). General psychology: Modeling behavior and experience. Englewood Cliffs, NJ: Prentice Hall.
- Dentzer, E., & Wheelock, A. (1990). Locked in/locked out: Tracking and placement practices in Boston public schools. Boston, MA: Massachusetts Advocacy Center.
- Desiderato, O., Howieson, D. B., & Jackson, J. H. (1976). Investigating behavior: Principles of psychology. New York: Harper & Row Publishers, Inc.
- Dorman, G., Lipsitz, J., & Verner, P. (1985). Improving schools for young adolescents. Educational Leadership, 43 (6), 44-48.
- Drever J. (1964). A dictionary of psychology. Revised by H. Wallerstein, Baltimore, MD: Penquin.
- Drucker, P. F. (1981). The next american work force: demographics and U.S. economic policy. Commentary, 77 (4), 3-10.
- Dunkin, M. J., & Biddle, B. J. (1974). The study of teaching. New York: Holt, Rinehart, & Winston.
- Dusek, J., (Ed.). (1985). Teacher expectations. Hillsdale, NJ: Erlbaum.
- Eash, M. J. (1966). Grouping: What have we learned? In A. Morgenstern (Ed.), Grouping in elementary school. New York: Pitman Publishing Company.
- Eccles, J. S., Midgley, C., Feldlaufer, H., Reuman, D., Wigfield, A., & MacIver, D. (1988). Developmental mismatch and the junior high school transition. Paper presented at the Biannual Meeting of the Society for Research on Adolescence.

- Eccles, J., & Wigfield, A. (1985). Teachers' expectations and student motivation. In J. Dusek (Ed.), Teacher expectations. pp. 185-217. Hillsdale, NJ: Erlbaum.
- Eder, D. (1981, July). Ability grouping as a self-fulfilling prophecy: A microanalysis of teacher-student interaction. Sociology of Education, 54 (3), 151-162.
- English, H. B. (1958). A comprehensive dictionary of psychological and psychoanalytical terms. New York: McKay.
- Esposito, D. (1973). Homogeneous and heterogeneous grouping: Principal findings and implications for evaluating and designing more effective educational environments. Review of Educational Research, 43, 163-179.
- Etzioni, A. (1983). An immodest agenda: Rebuilding America before the twenty-first century. New York: McGraw-Hill Book Company.
- Fielding, N. G., & Lee, R. M. (1991). Using computers in qualitative research. Newbury Park, CA: Sage Publications.
- French, D., & Rothman, S. (1990). Structuring schools for student success: A focus on ability grouping. Boston, MA: Massachusetts Department of Education.
- Fullan M. G. (1982). The meaning of educational change. New York: Teachers College Press.
- Fullan, M. G., & Miles, M. B. (1992, June). Getting reform right: What works and what doesn't. Phi Delta Kappan, 73 (10), 744.
- Fullan M. G., & Stiegelbauer, S. (1991). The new meaning of educational change. New York: Teachers College Press.
- Gamoran, A., & Berends, M. (1987). The effects of stratification in secondary schools: Synthesis of survey and ethnographic research. Review of Educational Research, 57, 415-435.
- George, P. S. (1988). Tracking and ability grouping. Middle School Journal, 20 (1), 21-28.
- George, P. S., & Alexander, W. M. (1993). The exemplary middle school, 2nd Edition. Orlando, FL: Harcourt Brace Jovanovich.
- Glickman, C. D. (1990). Supervision of instruction: A developmental approach, 2nd Edition, Boston, MA: Allyn and Bacon.

- Golan, N. (1981). Passing through transitions. New York: Free Press.
- Good, T. L. (1981). Teacher expectations and student perceptions: A decade of research. Educational Leadership, 38, 415-422.
- Good, T. L., & Brophy, J. L. (1987). Looking in classrooms. New York: Harper & Row.
- Good, T., & Marshall, S. (1983). Do students learn more in heterogeneous or homogeneous groups? In P. Peterson, L. Wilkenson, & M. Hillinan (Ed.), The social context of instruction: Group organization and group process, pp. 15-38. Orlando, FL: Academic Press.
- Goodlad, J. I. (1984). A place called school: Prospects for the future. New York: McGraw-Hill Book Company.
- Goodlad, J. I., & Oakes, J. (1988). We must offer equal access to knowledge. Educational Leadership, 45 (5), 16-22.
- Graham, K. (1983). Introduction to survey sampling. (Quantitative Applications in the Social Sciences). Newbury Park, CA: Sage Publications.
- Halliham, M., & Sorensen, A. (1983). The formation and stability of instructional groups. American Sociological Review, 48 (6), 839-851.
- Halliham, M., & Sorensen, A. (1985). Ability grouping and student friendships. American Educational Research Journal, 22, 485-499.
- Harvey, O. J., Hunt, D. E., & Schroeder, H. M. (1961). Conceptual systems and personality organization. New York: Wiley.
- Heathers, G. (1967). Organizing schools through the dual progress plan: Interstate.
- Heller, K. A., & Parsons, J. E. (1981). Teacher influences on students expectations for success in mathematics. Child Development, 52, 1015-1010.
- Hilliard, A. (1989). Teachers and cultural styles in a pluralistic society. NEA Today, (7), 65-69.
- Howe, M. J. A. (1970). Introduction to human memory. New York: Harper & Row.
- Husen, T., & Postlethwaite, T. N. (Ed.). (1985). International Encyclopedia of Educational Research. 7:P-R New York: Pergamon Press.

- Johnston, J. H., & Markle, G. C. (1986). What research says to the middle level practitioner. Columbus, OH: National Middle School Association.
- Kelly, D. H. (1974). Student perceptions, self-concept and curriculum assignment. Urban Education, 9, 257-269.
- Koffka, K. (1922). Perception: An introduction to the Gestalt-theories. Psychological Bulletin, 19, 531-585.
- Kulik, J. A. (1992, February). An analysis of the research on ability grouping: Historical and contemporary perspectives. (Ability Grouping: Research-Based Decision Making Series). Storrs, CT: The National Research Center on the Gifted and Talented.
- Kulik, C.-L., & Kulik, J. A. (1982). Effects of ability grouping on secondary school students: A meta-analysis of evaluation findings. American Educational Research Journal, 19, 415-428.
- Kulik, C.-L., & Kulik, J. A. (1984). Effects of ability grouping on elementary school pupils: A meta-analysis. (ERIC No. ED 255 329). Toronto: Annual Meeting of the American Psychological Association.
- Kulik, J. A., & Kulik, C. C. (1984). Effects of accelerated instruction on students. Review of Educational Research, 54 (2), 409-425.
- Leder, G. C. (1987). Teacher-student interaction: A case study. Educational Studies in Mathematics, 18, 255-271.
- Leontief, W. W. (1982). The distribution of work and income. Scientific American, 247 (3), 188-204.
- Levenson, S. (1979). Ability grouping in schools: A national phenomena. (ERIC Document Reproduction Service No. ED 157 975)
- Levine, S. L. (1989). Promoting adult growth in schools. Boston: Allyn & Bacon.
- Levinson, D. J. (1977). The seasons in a man's life. New York: Knopf.
- Lindsay, P. H., & Norman, D. (1972). Human information processing: An introduction to psychology. New York: Academic.
- Lipsitz, J. S. (1979). Adolescent development: Myths and realities. Children Today, 8 (5), 1-9.

- Locke, L. F., Spirduso, W. W., & Silverman, S. J. (1989). Proposals that work: A guide for planning dissertations and grant proposals. Newbury Park, CA: Sage Publications.
- Lounsbury, J. H. (1991, November). A fresh start for middle school curriculum. Middle School Journal, 23 (1), 3-7.
- Low, D. (1988, April). Ability grouping: Decision making at the secondary level. New Orleans, LA: American Educational Research Association.
- Marshall, C., & Rossman, G. (1989). Designing qualitative research. Newbury Park, CA: Sage Publications, Inc.
- Martin, J., & Evertson, C. (1980). Teachers' interactions with reading groups of differing ability levels. In Brophy and Good. Austin, TX: University of Texas, Research and Development Center for Teacher Education.
- Maslo, A. H. (1954). Motivation and personality. New York: Harper and Row.
- McNergney, R. F., & Carrier, C. A. (1981). Teacher development. New York: Macmillan.
- Merina, A. (1989). Are we on the right track? NEA Today, 8 (3), 10-11.
- Metz, M. H. (1978). Classrooms and corridors: A study of authority in American secondary schools. Berkeley, CA: University of California Press.
- Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Change in teacher efficacy and student-self and task-related beliefs in mathematics during the transition to junior high school. Journal of Educational Psychology, 81 (2), 247-258.
- Miles, M. S., & Huberman, A. M. (1984). Qualitative data analysis: A sourcebook of new methods. Beverly Hills, CA: Sage Publications, Inc.
- Millman, J., & Johnson, M. J. (1964). Relation of section variance to achievement gains in english and mathematics in Grades 7 and 8. American Educational Research Journal, 1, 47-51.
- Mozdoerz, G. M., McConville, M., & Krauss, H. (1968). Classroom status and perceived performance. Journal of Social Science, 75, 185-190.
- Murry, H. B., & Staebler, B. K. (1974). Teacher's locus of control and student achievement gains. Journal of School Psychology, 12, 305-309.

- Neugarten, B. L. (1977). Personality and aging. In J.E. Birren & K. W. Schaie (Eds), Handbook of psychology of aging. New York: Van Nostrand Reinhold.
- Noland, T. K., & Taylor, B. L. (1986, April). The Effects of ability grouping: A meta-analysis of research findings. San Francisco, CA: American Educational Research Association.
- Oakes J. (1985). Keeping track: How schools structure inequality. New Haven, CT.: Yale University Press.
- Oakes, J. (1988, January). Tracking: Can schools take a different route? National Education Association Journal, 77 (5), 41-47.
- Oja, S. N. Toward a theory of staff development. Paper presented at The American Educational Research Association Annual Meeting, San Francisco, CA.
- Parsons, J. E., Kaczala, C. M., & Meece, J. L. (1982). Socialization of achievement attitudes and beliefs: Classroom influences. Child Development, 53, 322-339.
- Patton, M. Q. (1990). Qualitative evaluation and research methods, 2nd Edition. Newbury Park, CA: Sage Publications.
- Piaget, J. (1977). The science of education and psychology of the child. New York: Penguin Books.
- Powers, W. T. (1973). Behavior: The control of perception. Chicago IL: Aldine.
- Rist, R. C. (1970). The self-fulfilling prophecy in ghetto education. Harvard Educational Review, 40 (3), 411-451.
- Rogers, K. B., & Kimpston, R. D. (Oct. 1992). Acceleration: What we do vs. what we know. Educational Leadership, 50 (2), 58-62.
- Rutter, M., Maughan, B., Mortimore, P., Ouston, J., & Smith, A. (1979). Fifteen thousand hours. Cambridge, MA: Harvard University Press.
- Sarason, S. (1971). The culture of the school and the problem of change. Boston, MA: Allyn & Bacon.
- Schwartz, F. (1981). Supporting or subverting learning: Peer group patterns in four tracked schools. Anthropology & Education Quarterly, 12 (2), 99-120.
- Sells, L. W. (1981). The critical role of elementary school mathematics in equalizing opportunity. Arithmetic Teacher, 29 (1), 44-45.

- Shafer, W. E., & Olexa, C. (1971). Tracking and opportunity. Scranton, PA: Chandler Publishing Company.
- Slavin, R. (1986). Ability grouping and student achievement in elementary schools: A best evidence synthesis. Baltimore MD: The Center for Research on Elementary and Middle Schools, Johns Hopkins University.
- Slavin, R. E. (1987, Fall). Ability grouping and student achievement in elementary schools: A best-evidence synthesis. Review of Educational Research, 57 (3), 293-336.
- Slavin, R. E. (1988) Ability grouping in the middle grades: Effects and alternatives. Paper presented at The American Educational Research Association Annual Meeting, Chicago, IL.
- Slavin, R. E. (1990). Achievement effects of ability grouping in secondary schools: A best-evidence synthesis. Review of Educational Research, 60, 471-499.
- Slavin, R. E., Braddock II, J. H., Hall, C., & Petza, R. J. (1989, June). Alternatives to ability grouping. Baltimore, MD.
- Smart, M. S., & Smart, R. C. (1973). Adolescence. New York: Macmillan Publishing Company.
- Smylie, M. A. (1988, Spring). The enhancement function of staff development: Organizational and psychological antecedents to individual teacher change. American Educational Research Journal, 25 (1), 1-30.
- Spradley, J. S. (1979). The ethnographic interview. New York: Holt, Rinehart, and Winston.
- Spear, R. C., Appropriate Grouping Practices for Middle Level Students. (Chap 14). In J. Irvin, (Ed.). Transforming middle level education: Perspectives and possibilities. Needham Heights, MA: Allyn and Bacon.
- Sprinthall, N. A., & Thies-Sprinthall, L. (1982). Career development of teachers. Encyclopedia of Educational Research, 5th Edition. New York: Free Press.
- Squires, J. R. (1966). National study of high school english programs: A school for all seasons. English Journal, 55, p.282-290.
- Starkey, R., & Klusendork, A. M. (1977). Students' attitude toward tracking. (ERIC Document Reproduction Service No. ED 146 056).

- Stern, P., & Shavelson, R. (1981). The relationship between teacher grouping decisions and instructional behaviors: An ethnographic study of reading instruction. Paper presented at the Annual Meeting of the American Educational Research Association.
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory, procedures, and technique. Newbury Park, CA: Sage Publications.
- Suygg, D. (1936). Maze learning as perception. Journal of Genetic Psychology, 49 231-239,
- Terman, L. (1923). Intelligence tests and school reorganization. New York: World Book Company.
- Tracz, S. M., & Gibson, S. Teacher efficacy: Its relationship to teacher time allocation, student engagement and student achievements. Paper presented at the Annual Meeting of the American Educational Research Association. Washington, D.C.
- Trimble, K. D., Putman, R. M., & Sinclair, R. L. (1988). Making the best of it: Teachers perceptions of students and ability grouping. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Trimble, K., & Sinclair, R. L. (Spring 1987). On the wrong track: Ability grouping and the threat to equity. Equity and Excellence, 23 (1-2), 12-21.
- Tyler, R. (1989). Personal Conversation at University Of Massachusetts, Center for Curriculum Studies.
- Van Hoose, J., & Strahan, D. (1988). Young adolescent development and school practices: Promoting harmony. Columbus, OH: National Middle School Association.
- Warnock, G. J. (1967). The philosophy of perception. USA: Oxford University Press.
- Wheelis, A. (1958). The quest for identity: New York: W. W. Norton & Co., Inc.
- Wheelis, A. (1973). How people change. New York: Harper & Row Publishers, Inc.
- Wheelock, A. (1992, October). The case for untracking. Educational Leadership, 50 (2), 6-10.
- Wheelock, A. (1992). Crossing the tracks. New York: The New Press.

- Whitbourne, S. K. (1986). Adult development. New York: Praeger.
- Wilkson, L., Cherry, L., & Calculator, S. (1982). Requests and responses in peer-directed reading. American Educational Research Journal, 19 (1), 107-120.
- Wilson, B. J., & Schmits, D. W. (1987). What's new in ability grouping. Phi Delta Kappan, 59 (8), 535-536.
- Wolcott, H. F. (1990). Writing up qualitative research. Newbury Park, CA: Sage Publications.
- Wood, F. H., & Thompson, S. R. (1980). Guidelines for better staff development. Educational Leadership, 37 (4), 375-377.

