GROUPING AT LAUREL FALLS MIDDLE SCHOOL AND

THE PRACTICAL WISDOM OF YOUNG GIFTED ADOLESCENTS

by

LISA R. SWOR

(Under the direction of Dr. Bonnie Cramond)

ABSTRACT

Any time schools undergo change in structure or policy, students and educators are affected. Around 1990, the school at which I taught was detracked in favor of heterogeneous grouping for all students. Because I had taught all eighth-graders in the lowest and highest tracks for several years prior to this change, I was interested in both groups' perceptions of how grouping affected them. Since many scholars had conducted studies of grouping effects on children in lower tracks, I chose to focus on the gifted.

For nine weeks in 1990, I observed 41 identified gifted children, classmates, and teachers at Laurel Falls Middle School (pseudonym). This gifted cohort completed four questionnaires concerning their perceptions of their achievement, motivation, peer interaction, and self-esteem in homogeneously versus heterogeneously grouped classes, and four were interviewed. Responses to some items on *Questionnaires A and B* about the appeal or lack of appeal of homogeneously and heterogeneously grouped classes, and related interview questions, are discussed in this document. Demographic information about gifted students, their school, school system, and community is also presented.

Most frequently cited in the gifted cohort's responses about the appeal or lack of appeal of mixed and like-ability classes was being able to work at their own achievement or ability levels. Over 73% said homogeneously grouped classes appealed to them because instruction was more apt to be appropriate for their ability levels. The pace of these classes was also an appeal (63%). When discussing heterogeneously grouped classes, 56% mentioned frustration and boredom when unable to achieve at their levels. Friendships were important in both types of classes, and gifted students delineated specific connections between homogeneously grouped peers. Students also noted that there was less pressure in mixed classes and said they provided a break.

Two particular problems in the school studied were the severe underrepresentation of minority students in the eighth grade gifted program in 1990, and the lack of teacher preparation for serving special populations in the regular classroom after detracking.

Concerns about heterogeneous grouping from the gifted students' point of view and negative consequences of detracking are recorded in this study. Other studies elaborate negative effects of tracking for the nongifted. It is reasonable to conclude that no child's education and well-being should be sacrificed for another child's, yet surely there is more than one workable solution to this dilemma. Perhaps it involves new and creative ways of thinking about school, school success, intelligence, and talent.

INDEX WORDS: Gifted, Grouping, Ability-Grouping, Tracking, Adolescent, Middle School

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DEDICATION

This study is dedicated to my husband, Mike Snapp, who loves me well. By supporting me unconditionally in so many ways, he has given me the freedom to pursue my goals and do the things that I want to do.

This work is also dedicated to my sweet children, Lauren Snapp and David Michael Snapp, who have learned patience, independence, and generosity of spirit as we have traveled this long road of Mom's degree together. Guess what, kids? I'm back!

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CHAPTER 1

INTRODUCTION: WHAT WOULD THE GIFTED CHILDREN SAY?

The Genesis of the Question

William James said, "You can't pick up a rocks in a field without a theory" (Agar, 1980, p. 23). And, of course, theories emerge from one's experience and questions about that experience. My questions about grouping began when I got the extremes.

In 1986, I began my second year of teaching with a new assignment. No longer would I teach 7th graders at what was then called Laurel Falls Junior High (a pseudonym) as I had the year before. Instead, I would teach three classes of Basic Skills English (the lowest of three levels) and two classes of American Heritage English (the highest). Since ours was the only junior high school in the city, with approximately 1300 students, what this essentially meant was that I would not only be teaching all of the lowest achieving eighth grade students in town, I would also teach all of the city's academically gifted eighth graders. I got the extremes. Perhaps I got this assignment because I had, with some success, taught two Basic Skills English classes the year before; perhaps my masters degree with an emphasis in gifted education had something to do with my getting the gifted kids. One never knows about these things. Nevertheless, I accepted this new challenge and began what amounted to a three-year stint of teaching those children in our city representing, in achievement, the narrow ends of the bell curve.

The next three years can best be described as exciting, rewarding, and surprising. I include surprising because I soon found that, through experience, my students began to train me to be a completely different teacher in the morning when I had Basic Skills classes than I was in the afternoon when the American Heritage kids came in. In the morning, my classes were highly structured—the children expected and depended on a certain routine. In the afternoon, I made a

point to vary activities—too much repetition drove them crazy. When children in the morning worked together on a project, pairs seemed to be most productive. When students in the afternoon worked together for an activity, group sizes were more flexible with groups of 2–8, depending on the nature of the assignment. In the morning, directions were given in no more than three steps and, when possible, were similar to some the children had followed before. In the afternoon, complex directions were often given and rarely repeated. My Basic Skills students gained confidence from assignments allowing them to practice, two and three times, the skills they were learning. They generally got better and better grades each time, and expressed obvious self-satisfaction when they mastered the skill. American Heritage students appreciated it when I compacted curriculum they had already mastered and challenged them with activities and concepts that would have only frustrated and demoralized their peers in the morning classes. The pace in the morning was steady and allowed for an adequate amount of guided practice and reteaching. The pace in the afternoon was accelerated, and many times, when asked if anyone had a question or wanted an example written on the board before beginning their homework, students replied with an emphatic chorus of, "Noooooo!" Very little reteaching was necessary.

These examples are only a few of the differences I observed in my classroom. They do, however, make clear what piqued my interest in grouping structures, particularly homogeneous grouping structures. I also became curious about how children and their learning are affected within homogeneous versus heterogeneous grouping structures. From my experience and observation, I found great differences in what both groups of children required from me as a teacher, in their learning environments, and in teaching methods and techniques. By attending to and accommodating those differences (such as pace, structure, complexity, repetition, and amount of guided practice), most students in both groups were successful academically and appeared to be pleased with themselves and their progress. From my standpoint as a teacher at that time, homogeneous grouping was a practical means of congregating students that appeared, in my classes at least, to benefit children in both levels. Moreover, because the groups' learning

preferences and needs were often diametrically opposed, I found myself questioning specifically how changes in grouping structures would affect the children in each group.

A Literature Overview and the Missing Voices

Scholars and practitioners in education have been debating the efficacy of various grouping structures, particularly homogeneous versus heterogeneous grouping structures, for more than eighty years (Slavin, 1988) and, in that time, have produced an estimated 750 studies on the topic (Rogers, 1998).

To provide a beginning point on the complex grouping debate and underlying impetus for ongoing grouping research, a presentation of the major alternative viewpoints on the issue is instructive. On the one hand, there are those who promote heterogeneous grouping for all children, asserting that it is the most democratic, non-elitist method of congregating children for learning. Such proponents of heterogeneous grouping models propose that optimal instructional methods can be used to provide the greatest achievement and socialization growth for the greatest number of students in the group, and thereby also avoid risks of the lack thereof to racial, ethnic, or socioeconomic subgroups or particular ability groups (Grant & Rothenberg 1986; Hallinan 1984; Oakes 1985; Slavin 1987). Joining heterogeneous grouping proponents, and publishing anti-ability-grouping syntheses of research—about the same time Laurel Falls became a middle school in 1988—are several middle school scholars who, at that time, reported that ability grouping was antithetical to middle school goals and philosophy (Braddock, 1990; Johnson & Markle, 1986; George, 1988). "Ability grouping," wrote Johnson and Markle (1986) "interferes with the opportunities for students to learn from—and learn to accept—peers of different socioeconomic backgrounds, and may perpetuate notions of superior and inferior classes of citizens" (p. 59). Consequently, one year after implementing the middle school model in our school, Laurel Falls administrators responded to these assertions and in 1989 began dismantling the Challenge Program, a homogeneously grouped program that had been serving the gifted at

each grade level since 1984. The precursor of the Challenge Program at the eighth grade level, known as the American Heritage Program, and also homogeneously grouped, had been operating since the school opened in 1976.

On the other hand, there are those who point out that heterogeneous grouping for all children is particularly discriminatory against highly able learners, and for that reason alone (they also list others) could be deemed undemocratic because, as Fiedler, Lange, and Winebrenner (1992) quote Jefferson, "Nothing is so unequal as the equal treatment of unequal people (4)." Other gifted education scholars further extend this point by asserting that "homogenization attempts to create equal treatment of unequals—[and] this approach is inherently unjust to the most and least able. Justice is achieved not by equality of treatment, but by *equality of opportunity* [their emphasis]" (Feldhusen & Moon, 1992, p. 65). Some of these individuals also express concern that findings of anti-ability-grouping proponents have been overgeneralized among populations not represented in the research on which the findings were based, such as the gifted, and point out that this overgeneralization of research and similar misunderstandings by other scholars and practitioners have occurred with such alarming frequency that many gifted programs across the country have been dismantled (Benbow, 1992)—often as a result of faulty decision making by those relying on misinterpreted or overextended evidence from the research. (Allen, 1990; Feldhusen, 1992; Robinson,1990; Rogers, 1993). Then there are those who claim the middle ground when discussing grouping structures by proposing that, with appropriate funding, planning, teacher-training, and long-term commitment within the community, school system, and school, the use of flexible grouping methods such as cluster grouping (Renzulli, 1999), or reliance on carefully differentiated instruction and planning for at least three different ability levels within a heterogeneously congregated classroom (Tomlinson, 1999), the needs of all ability levels can be adequately addressed. Other curricular modifications designed to meet the needs of heterogeneously grouped students within the regular classroom have been suggested as well (Archambault et al., 1993; Hays, 1993; Westberg, Archambault, Dobyns, & Salvin, 1993).

Examples of these are curriculum compacting, using appropriately designed open-ended activities, and contracting with gifted students, to name a few (Hertzog, 1997; Reis, Burns, & Renzulli, 1992; Weinbrenner, 2000).

In 1990, when this study began, emotions on all sides of the grouping debate were running high. Opposing forces were busily scouting the theoretical, philosophical, moral, and empirical battlefield for rhetorical high ground, aligning their arguments to form impenetrable front lines, and sharpening their statistical pencils to amass formidable ammunition with which to confront their opposition. And today, the discussion rages on. Recently, Rogers (1998) reported that at least 26 single studies and two new meta-analytic studies on various forms of ability grouping have been conducted since she evaluated 13 extant meta-analytic grouping studies in 1991. In 1999, Goldman, editor of *The School Administrator,* commented on the emotional intensity evident among parents questioning whether "high-end learners [can] excel in mixed-ability classrooms." Said Goldman, "Over the past year I've seen parents of gifted students at the middle school level turn a public forum on differentiated learning into an emotional slugfest" (p. 3). In the same issue, Winebrenner (1999) challenged school districts to uphold their mission statements by revamping failed programs and renewing efforts to provide programs that adequately meet the unique needs of gifted children.

Although leaders representing opposing camps continue to disagree as to which grouping structures are best, they do agree that there is still a need for more information and specific grouping research (Feldhusen, 1992; Oakes, 1986; Robinson, 1990; Slavin 1988). Clearly, one could dedicate prodigious time and energy to sorting through research and scholarly discussion on grouping issues. I did. But as I did, I could not help but notice that certain voices in this long, broad, and very convoluted discussion were missing. They were the voices of my students–the gifted ones often being discussed. The more teachers spend time with students, the more adept they become at listening to them and recognizing the value of their perspective, their incisiveness, and their ability to contribute meaningfully to a discussion, especially when the discussion is

about them. Consequently, as I read through study after study about grouping structures for children, and in this case gifted children, I could not help but wonder about the perceptions of the gifted, what they would say about their experience with various grouping structures, and how they perceive their own motivation, achievement, self-esteem, and peer-relationships within different grouping structures.

Shields (1995), also interested in gifted students' perceptions, noted that despite the multiplicity of studies addressing student achievement within various grouping arrangements, few empirical studies examining the impact of gifted programs on students' attitudes and perceptions of themselves as learners have been published.

Questioning, and Listening to the Voices: Focus of the Research

The first and immediate goal of this study was to use appropriate and complementary qualitative and quantitative research methods to investigate and ultimately describe how homogeneous versus heterogeneous grouping structures affect young gifted adolescents' perceptions of their achievement, motivation, self-esteem, and peer interaction.

The second, long-term, goal of this study was to collect data containing rich description by means of disciplined inquiry to discover important new questions, processes, and relationships, and generate hypotheses that may one day lead to the establishment of grounded theory.

In a nine week period from late March through the end of May, 1990, forty-one gifted eighth graders attending Laurel Falls Middle School were observed in their English, social studies, science, and algebra classes to collect information about their perceived achievement, motivation, self-esteem, and peer interaction when grouped homogeneously for their academic classes. Other qualitative data were also collected in the form of questionnaires, interviews, and artifacts. These children's teachers and school administrators were interviewed, and, based on theoretical and sequential selection strategies, four individual gifted children were interviewed.

CHAPTER 2

RESEARCH DESIGN: THE COMMUNITY, THE SCHOOL, THE STUDENTS, THE QUESTIONS ASKED

The Community and School Setting In Which the Question Arose—The Coming Change in Organizational Structure

In these early years of my teaching career, 1985–1989, I lived and worked in the Appalachian Mountain region of the Eastern United States in a city with a population of nearly 50,000 people. At this time there were nine elementary schools, one middle school, and one high school in the city school system. Until the 1988–1989 school year, the school at which I taught, Laurel Falls Junior High (a pseudonym), included grades 7, 8, and 9. As a junior high, it was arranged in a departmentalized fashion, and students followed individualized schedules that took them all over the school. Each student was enrolled in two exploratory classes such as art, band, or health, and four academic classes. The seventh and eighth graders were scheduled for six 6-week terms; the ninth graders were scheduled for four 9-week terms. Exploratory classes were heterogeneously grouped. Academic classes were homogeneously grouped into three different levels and known by the teachers as Basic Skills, Regular, and Challenge classes. Students enrolled in the Challenge classes had to meet specific academic criteria, and they and their parents were required to sign a contract at the beginning of each class spelling out requirements for effort and academic performance and the consequences (generally removal from the class) should the requirements not be met. All other students were placed in either Regular or Basic Skills classes based on standardized test scores, teachers' recommendations, administrators' judgement, and parents' request. Although some students crossed into classes either a level above or a level below the level in which they began, the groupings were fairly static, except

when a Basic Skills student was occasionally moved to a Regular class, a Regular student struggled and was placed in Basic Skills, or when a Challenge student failed to fulfill the requirements outlined in the Challenge class contract, and was moved into a Regular class. These grouping structures for the eighth grade had been in place since the school opened in 1976. Prior to this there had been two junior high schools in the city. Each had also grouped academic classes by ability and/or achievement.

Most teachers at Laurel Falls elected to teach the various grade levels and classes that they were teaching. Challenge classes and Basic Skills classes were usually smaller than Regular classes. Class size in the Challenge classes ranged between 20 and 25 students, and Basic Skills class sizes varied, but sometimes had fewer than 10 students in them and usually had no more than 20. Regular classes could have had as many as 25 – 30 students. Occasionally, teachers who did not want to teach Challenge classes were required to do so, and more often, any Basic Skills classes not taught by faculty desiring to teach them were assigned to teachers with less seniority, or the most recent hires. In my first year of teaching, 40% of my students were in Basic Skills classes.

The Restructured or "New" Middle School: The Setting of the Study

Table 2.1

The Reconfiguration of Laurel Falls School From Before 1974 to 2002

Year	Reconfiguration
Before 1974	Two schools served the seventh-ninth grade school population.
1974	Two junior high schools merged to become the single city junior high.
	Laurel Falls Junior High served grades 7-9.
	Students in grades 7 and 8 were grouped in three different academic levels.
1976	In this bicentennial year, teachers conceptualized an integrated arts program for

	eighth grade gifted students and called it American Heritage.
1983	The Challenge Program, designed for academically gifted students in the 7th and 8th grades, and called the American Heritage Program in the eighth grade, was implemented. Early on, it included homogeneously grouped classes for identified gifted students. In the final years, the academically gifted in the eighth grade were served in five homogeneously grouped academic classes.
1988	After adopting the middle school philosophy, Laurel Falls became a middle school serving grades 6-8. The ninth grade was moved to the high school campus. Over the next ten years, the Challenge program for the gifted was, year by year, systematically dismantled, and the gifted were eventually placed on all teams at each grade level.
1998	A new school was built to house the sixth and seventh grades. Laurel Falls' campus was absorbed by the high school located on adjoining property. The eighth grade became part of the high school that now serves grades 8-12. Eighth graders are presently grouped according to exploratory class choices (band, chorus, orchestra, etc.)
2002	No new changes occurred in eighth grade grouping procedures. Beginning with the 2002-2003 school year, however, grades 9-12 at the high school will collapse levels in English classes from 3-4 levels to 2 levels per grade. For seniors, for example, existing levels (AP, Honors, College Prep, and Regular) will be collapsed to 2 levels (AP and College Prep).

Beginning with the 1988-1989 school year, Laurel Falls implemented the middle school concept, and became a middle school. One aspect of the middle school philosophy strongly

supported by the school's principal was a move toward replacing the existing grouping system with heterogeneous grouping for all students whenever possible.

The existing gifted program—consisting of homogeneously grouped classes that were accelerated, enriched, and differentiated for the gifted in language arts, algebra, reading, social studies, and science—began to be systematically dismantled as administrators attempted to create more heterogeneous groupings among teams at each grade level. In the 1988-89 school year, eighth grade gifted students were grouped together on the same team (one of the four teams) and were taught by teachers who had, in the junior high setting, previously taught the highest level, the challenge classes. I was one of those teachers. In the 1989-90 school year, the gifted were placed on two of the four eighth grade teams. I was on leave and enrolled in graduate school at this time. However, in the spring of 1990, I returned to the school in the role of researcher and collected data for this study.

Then, in the 1990–1991 school year, administrators initially planned to place the gifted on each of the four eighth grade teams. This did not occur because of other special education scheduling and staffing constraints, and instead gifted students were placed on three of the four eighth grade academic teams. At the beginning of this school year, I returned to my position as one of the teachers working with the three other Challenge class teachers and also resumed team-leader responsibilities for that team. I taught English on one of the four eighth grade teams. Ours was one of the three teams with gifted students.

In the 1992-93 school year, I was reassigned to lead another team of eighth grade teachers who had in the prior year received several complaints from parents. The eighth grade principal explained that the assignment change was made because my leadership skills were needed. When teachers reported for inservice the next fall, my new team was designated the "inclusion" team meaning that all eighth grade special education students who could be mainstreamed with consultation would be on our team. In that same year, academically gifted

children were dispersed among all four eighth grade teams. The gifted had not been placed on this team before this.

In the year before the implementation of the middle school concept, the Laurel Falls school system had offered and paid for graduate and undergraduate middle school coursework for teachers willing to meet weekly after school with local university instructors to fulfill course requirements. I attended the classes and earned three hours of graduate credit. Although inclusion and mainstreaming were presented as being consistent with middle school philosophy, little specific and practical information about meeting the needs of special education students in the regular classroom was discussed. Then, and in the following years during the dismantling of the Challenge program, little to no formal training for meeting the needs of the gifted in the regular classroom was offered to the teaching staff. When parents of the gifted questioned how their children were being served, teachers were asked by the administration to make a list of ways they chose to meet the needs of the gifted in the regular classroom. These lists were then reviewed and discussed at a meeting with parents, selected teachers, and principals.

Since 1998, when the middle school program ended, a grade 6-7 school opened, and the eighth grade was absorbed by the high school where eighth grade students' academic team (English, math, reading, science, and social studies) placement has since been dictated by their exploratory class choices. For example, all of the band students are now grouped together on one team, all of the chorus students are grouped on another, all of the athletes on another, and all of the orchestra students are on another. In the 1998—1999 school year, I transferred to the high school and have since been teaching all levels of junior English classes.

Participants and Data Collection

From late March thorough the end of May, 1990, I observed and studied 41 gifted eighth graders on two of the four eighth grade teams at Laurel Falls Middle School. For nine weeks I collected information about their perceptions of their achievement, motivation, self-esteem, and

peer interaction when grouped homogeneously for English, social studies, science, and algebra. The children selected for the study had been previously identified as gifted by the school using a three-criteria process based on IQ scores, achievement, or the creation of remarkable products. Each child was required to meet at least two of the three criteria to be identified as gifted by the school system.

I also collected qualitative data in the form of observations, questionnaires, and interviews and artifacts. Teachers teaching these children were interviewed, and some administrators were also interviewed.

Bias Statement

As stated earlier, my training prior to taking my first job included a masters degree with an emphasis in gifted education. My first experience in the teaching profession, or where I acquired on-the-job training, was in teaching lower achieving students. Such is fate. Such is destiny. By getting the extremes in the early years of my career when I was energetic and had the awareness and curiosity of a novice, I was especially motivated to meet the challenge of trying to figure out how to be a good teacher for both groups. Too, because I taught extreme ability/achievement levels in homogeneously grouped classes, one level in the morning and one in the afternoon, my questions and observations about similarities and differences between the groups arose consequentially and frequently. Seventeen years later, I have not tired of those questions. If my experience has taught me anything, it is that being aware of differences in the way children learn, individually and as mixed-ability or like-ability groups, is paramount; that accepting children and honoring them as human beings first and pupils second is essential; and that piquing their natural curiosity through challenges appropriate to their level is key in promoting their growth as learners and people. The other thing experience has taught me is that eighth grade children, if they are assured that we are interested and will really listen, will respond

thoughtfully to our questions and will earnestly tell us what they think. These young people can contribute a great deal to our understanding of how they learn.

My Role as Researcher

To me, a good metaphor for the educational process is a river. The children and their education is the river; we who try to affect it are the banks, the river bed, the rocks in the river bed, the dams erected, the Army Corp of Engineers – those who alter the natural course of the water, who move the bed or alter the flow. Sometimes, when we affect change on the river of our children's education, we free the flow, enhance it, direct it well, maximize its power, and the river moves freely and swiftly on through its course, the educational process.

Sometimes, however, if we inadvertently reposition a critical rock in the river bed, or erect a dam that is weak (a weak teacher, or program, or philosophy), or build it in the wrong place (works in California but not in North Carolina), we can cause, at the very least, a restriction in the educational flow – and worst, a major flood, or a disaster affecting hundreds of thousands of children and their learning.

Consequently, I see the responsibility of the educational researcher as weighty indeed. Researchers' work is used by practitioners to direct the educational flow. With the information educational researchers generate, practitioners create master plans (educational philosophy), hire visionaries who can see the big picture and workers who can get the job done (coordinators, evaluators, administrators, teachers), and go about building (programs and accompanying curricula) and changing the water path.

Every decision made and every person involved affect the flow of learning for our children. And, because the river is in constant motion and always changing itself, variables bearing on the course the river takes and its flow are numerous and often unpredictable. What if it rains (a population explosion, an influx of non-English-speaking children, a higher number of

at-risk or extremely academically able kids)? What if there is drought (fewer children, no money, lack of support from the community)?

When we alter the natural course of the educational river, we must be cognizant that the river runs through many different locations down stream and through time. Whatever we do, we must consider the effects and the consequences of our decisions and actions down the line and through the years. How will each of us affect the learning of our children? Will we increase the flow, free it, create whirlpools, flood the plain, inadvertently cause drought?

With such a formidable job before us, educational researchers, scholars, and practitioners must use all forms of pertinent information to make decisions and act on them. We must use multiple research paradigms relying on qualitative and quantitative methodologies to make the most informed decisions and draw the most accurate conclusions. We must tap all resources. We must investigate, measure, and attempt to make sense of all that we can.

As a teacher I have learned, through experience, that the perspective of my students is critical. They, after all, are those whom all educators are supposedly acting for and on. They are the river. In this study, I looked at the educational flow from the vantage point of the water itself. I sought the perspective of a few of the drops as they flowed along with the rest. Many have before researched the perspective of my other student groups such as children at risk, drop-outs, and underachieving students. I wanted to know more about the perspective of young gifted adolescents: What was their perception of and reaction to grouping structures? How did they say different grouping structures affected them and their learning in their school?

During the year that the data for this project were collected, I lived over one hundred miles away from the research setting—near the university I was attending. During the weeks in the spring and summer of 1990 when data were collected, I traveled to the Laurel Falls community and resided with friends while making daily trips to the school to observe, conduct interviews, and collect data. Because I had worked in the school for four years prior, I knew all of the faculty, administration, staff, and many of the students. Almost everyone was very

cooperative and very helpful in making it possible for me to conduct this research. Only two students in 1990 refused to participate in the study, and all teachers and administrators patiently sat through interviews, filled out forms, and allowed me veritable free reign in dropping in and observing their classes, the small groups that they sponsored, and their individual students.

The Audience for This Research

There are two major groups and intended audiences for this research. In the first group are teachers and students. When I went to school to get a higher degree, I went to learn more to become a better teacher. I am a teacher. In the words of the wise cartoon character Popeye, "I yam what I yam." Thus, my beginning and ending point is ultimately that of the teacher. Perhaps, in time, I may accept a position in higher education, and the ages of my pupils will change, but doing my part to enhance the educational flow while in close proximity to the students themselves, and to assist other teachers in doing the same, is my life goal as a professional. So it is, from a different vantage point, yet with the same goal in mind, that I hope to contribute to the second group, the scholarly community, who by continuously refining theory and practice ultimately attempts to enhance the educational flow as well. In addition, I would borrow from the Physician's creed. That is, I hope to "do no harm." This is perhaps the most challenging goal of the two. Should any other educator or community member, though undesignated above, such as policy makers, school administrators, or parents benefit from this work, I will be pleased.

Research Goals

The first goal of this study was to describe how homogeneous versus heterogeneous grouping structures affect gifted students' perceptions of their achievement, motivation, self-esteem, and peer interaction.

The second goal of this study was to collect data containing rich description by means of disciplined inquiry to discover important new questions, processes, and relationships, and generate hypotheses which may one day lead to the establishment of grounded theory.

Research Questions

The following research questions guided this study.

Achievement and Motivation

1. What instructional methods would young gifted adolescents describe as being most effective in helping them to learn and achieve?
2. How, according to the gifted students, do teachers and students manage time in heterogeneously and homogeneously grouped middle school classrooms?
3. How do gifted adolescents describe teachers' expectations in their homogeneously grouped and heterogeneously grouped classes?
4. Given a choice of homogenous versus heterogeneous classroom settings, which would a gifted middle school child choose, and why?
5. In which classes do young gifted adolescents consider themselves most motivated, and why do they think this is so?

Peer Interaction and Self-Esteem

1. How do gifted middle school children describe their interactions with peers in homogeneously versus heterogeneously grouped classes?
2. What do young gifted adolescents see as benefits and liabilities, if any, of each grouping situation?
3. In which classes do gifted middle schoolers say their friends are, and why do they think this is so?
4. Given a choice of working in groups or working alone, which do young gifted adolescents choose, in what situations, and why?

5. How do gifted middle school students rate their self-esteem?
6. Does the self-esteem of gifted middle school children in homogeneously grouped classes differ from those in heterogeneously grouped classes?

A Rationale for Using Qualitative Inquiry

The research goals and many of the research questions in this study depend on an understanding of the perspective of participants to clearly describe their worldview and meaning as they make it. Consequently, analytic strategies that are more inductive, generative, constructive, and subjective were used to effectively address the questions described above. Essentially, a goal of this research was to systematically describe the characteristics of variables and phenomena as they occurred in homogeneously grouped and heterogeneously grouped classrooms as perceived by young gifted adolescents. As this was done, conceptual categories were generated and refined, associations among phenomena were discovered and validated, and constructs and postulates were generated. Finally, reliance on constant comparison and inductive analysis of the data led to the formulation of hypotheses which were then developed, confirmed, or rejected (LeCompte & Preissle, p. 41-42).

Efforts Toward Establishing Grounded Theory

One goal of this research was to discover new questions, processes, and relationships about the effects of homogeneous versus heterogeneous grouping structures on the perceived achievement, motivation, self-esteem, and peer interaction of young gifted adolescents, and to generate hypotheses which may one day lead to the establishment of grounded theory. Establishing grounded theory is a means of amplifying and making sense of knowledge. Grounded theory is theory derived from data and later illustrated by characteristic examples emerging from that data, through the means of disciplined inquiry. According to Cronbach and Suppes (1969), an individual practicing disciplined inquiry anticipates traditional questions that

are pertinent, consistently institutes control as information is gathered to avoid errors elicited by these pertinent questions, and if these errors cannot be eliminated, takes them into account by discussing them and the margin for error in the conclusion. Thus, say these researchers, "the report of disciplined inquiry has a texture that displays the raw materials entering the argument and the logical processes by which they were compressed and rearranged to make the conclusion credible" (p 15-16). From this definition of disciplined inquiry, one may falsely assume that engaging in such a practice requires a very regimented and inflexible form of investigation. To the contrary, Cronbach and Suppes (1969) explained that

> disciplined inquiry does not necessarily follow well established, formal procedures. Some of the most excellent inquiry is free-ranging and speculative in its initial stages, trying what might seem to be bizarre combinations of ideas and procedures, or relentlessly casting about for ideas. (p. 16)

Generating grounded theory involves the systematic collection of data facilitated by theoretical sampling and comparative analysis (Glaser & Strauss, 1967). Both of these techniques require that the researcher be in direct contact with the source of data and continually code and analyze them as they are collected while making decisions about what data must be collected next. This process allows researchesr to develop their theory as it emerges and do away with false preconceptions as they are identified. In short, this process allows for the development of theory that is specific to the situation under investigation.

Selection Strategies, Data Collection, and Data Analysis

This study began with the criterion-based selection of a school site and heterogeneously and homogeneously grouped classrooms of young gifted adolescents. From that point I used theoretical and sequential selection strategies including the sampling of typical cases, extreme or deviant cases, unique cases, ideal cases, reputational cases, and comparable cases. I then conducted interviews and created questionnaires after findings, derived from participant

observation, generated questions and confirmed the viability, or lack thereof, of the initial guiding questions listed previously.

Once the interactive processes of data collection and simultaneous data analysis were underway, I began to look for emerging patterns by which relevant categories for sorting data could be created. Phenomena were matched, sorted, compared, and contrasted using various analytic strategies. These included theorizing or playing with the data to discover abstract categories and the relationships among them; using theoretical sampling and sequential selection strategies such as those listed previously, which helped me determine what data needed to be collected next; and relying on general analytic procedures. The analytic procedures that I used most were analytic induction and constant comparison.

Analytic induction involves searching through data for categories and determining possible relationships among them. Data that do not seem to fit are particularly important because they can be used to limit and refine working theories based on data collected thus far. Analytic induction is especially useful in generating ideas and constructs. Constant comparison is a data analysis strategy by which data are coded while comparing them with all incidents previously coded. Consequently, as data are collected, they are continually compared across all categories developed to that point. In doing so, researchers can continually refine categories to accommodate all new phenomena being coded.

Strengths and Limitations of Applying a Qualitative Design

Results of qualitative studies are not generalizable beyond the setting in which they are conducted. The findings can, however, be compared with results from other settings, given certain requirements are met. These are that the researcher "use standard and nonidiosyncratic terminology and analytic frames. Furthermore, the characteristics of the group studied or constructs generated must be delineated so clearly that they can serve as a basis for comparison with other like and unlike groups" (LeCompte & Preissle, p. 47).

Results from qualitative data can also be translatable in the sense that "research methods, analytic categories, and characteristics of phenomenon and groups are identified so explicitly that comparisons can be conducted confidently and used meaningfully across groups and disciplines" (Le Compte & Preissle, p. 47).

One means of increasing the credibility of a qualitative study and accompanying results is to build into the design the collection of data from a multiplicity of sources. A form of triangulation, this is done by compiling several different forms of data such as observations, interviews, the collection of physical objects, recordings, and questionnaires. Then, as conclusions are drawn using one form of data, they can be triangulated or compared with others to determine to what extent they support findings from all data sets collected.

Patton (1990) described four kinds of triangulation that enhance the verification and validation of qualitative analysis. They are methods triangulation, triangulation of sources, analyst triangulation, and theory/perspective triangulation:

> (1)checking out the consistency of findings generated by different data-collection methods, that is, methods triangulation; (2) checking out the consistency of different data sources within the same method, that is, triangulation of sources, (3) using multiple analysts to review findings, that is analyst triangulation; and (4) using multiple perspectives or theories to interpret the data, that is, theory/perspective triangulation. (p.464)

Using a combination of data sources, methods, theories, and where appropriate and possible, multiple observers not only gives credence to qualitative findings but also increases the likelihood of gathering rich data.

The benefits of using qualitative methods for this research are that they support a holistic approach to understanding how homogeneous and heterogeneous grouping affects young gifted adolescents. They provide the latitude to get at the "how" and "why" questions not as easily addressed in quantitative formats. Furthermore, in light of the controversy surrounding what

adults say, think, and determine are important factors in grouping gifted middle schoolers, and the relative inability of those adults to agree on what current findings mean or indicate, perhaps the view of those living the experience, the perspectives and reality made by the gifted middle school children themselves, will grant us new insight.

General Limitations of The Study

Most of the data, particularly those collected from students or other individuals participating in this study, were collected in 1990. Other historical and demographic information that could be found in school records, at the U.S. Census Bureau website or local library, or that came from my memory or experience as a teacher working in the same school system, have been used to provide a wider context and historical perspective on what has happened since data were collected.

When students in this study were answering questionnaire and interview questions about the appeal or lack of appeal of homogeneously or heterogeneously grouped classes, their homogeneously grouped classes were academic classes such as science or English, and their heterogeneously grouped classes were exploratory classes such as health or art.

CHAPTER 3

SPECIFIC ORIENTATION: A CLOSER LOOK AT THE GENERAL SETTING

Data used to describe the general setting of this study were derived from various sources including the U.S. Census Bureau, school records, interview notes, and responses to questions on *Questionnaire A,* which was created for this purpose.

The Community

The children and adults participating in this study lived in the Appalachian region of the Eastern United States. Their middle school was the only one serving a city population of nearly 50,000 people. The city itself, chartered in the late 1800s, had experienced steady population growth since 1950, with peak growth in the 1980s. By 1990, the local city population reached approximately 50, 000, and then, throughout the 1990s, growth slowed to roughly 12 % in the city proper but increased in surrounding areas. Nationally, the population of the United States has grown 13.1% since 1990. In recent years, the city's population reached more than 55,000.

Table 3.1

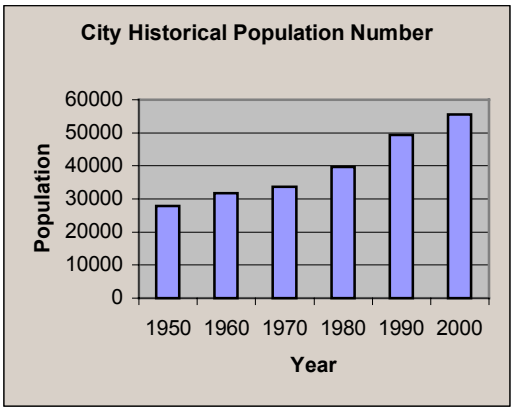
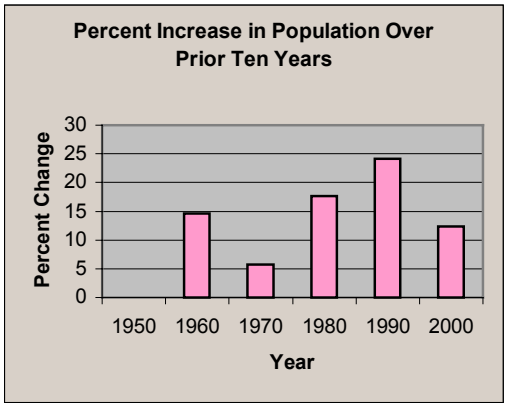


Table 3.2



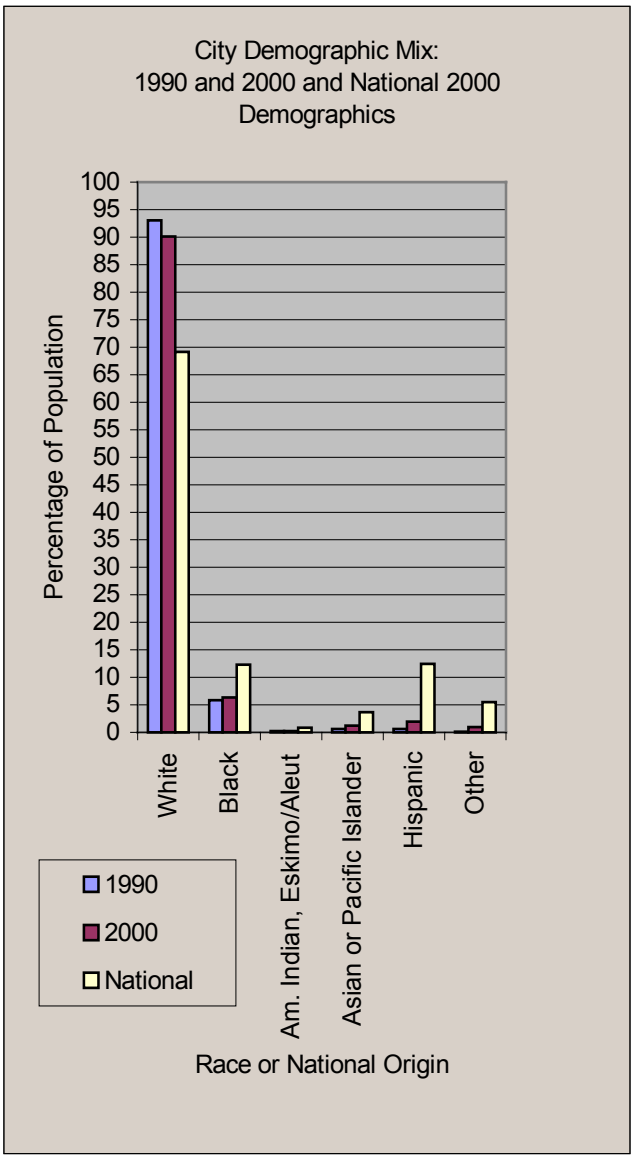
People in this city earned a median family income in 1989-90 of approximately $31,000 and a per capita income of about $13,000. Compared with over 700 cities of similar size across the country, this city ranked in the lower third, half, and fifth respectively when compared with the others for median family income, per capita income, and median household income. It is especially interesting to note, therefore, that for several years in the 1980s and early 1990s the city's school system boasted a top ten standing in teachers' salaries and per pupil expenditures within the state. It now ranks in the low teens on both measures. Also interesting in light of local income levels and national rankings and comparisons is according to the 1997 edition of Places Rated Almanac (Savageau & Loftus, p.169), the sole city high school, and the school for which Laurel Falls Middle was the only feeder school, was rated one of 298 outstanding high schools in the country. According to the almanac's authors, the ongoing ranking process is as follows: the U.S. Department of Education periodically polls the chief education officer in each state and the Council for American Private Education to nominate schools for consideration as the best secondary schools in the U.S. From that pool, all then undergo a stringent screening process by specialists in school improvement and accreditation. None of the specialists work for the federal government. Although thousands of schools have been nominated since 1990, only 715 have received official recognition for excellence in education. Of the 715 officially recognized outstanding schools, 648 are in metro areas. Of these, 350 are junior high schools, middle schools, and intermediate schools; 298 are high schools; and 143 of the 648 schools are private.

Demographic Data for the Community

The predominant race in the city population in 1990 was White, approximately 93%, with about 6% Black people living in the area. American Indians, Eskimos or Aleuts, Asians or Pacific Islanders, Hispanics, or "Other" made up the remaining 1%. By 2000, the city's demographic composition had changed with increases in the percentages of Black, Asian, and

Hispanic populations. The Black population grew by slightly less than a percent, while the Asian population nearly doubled, and the Hispanic population nearly tripled. This demographic change over the ten-year period between 1990 and 2000 is illustrated in Table 3.3 along with national demographic data for comparison.

Table 3.3

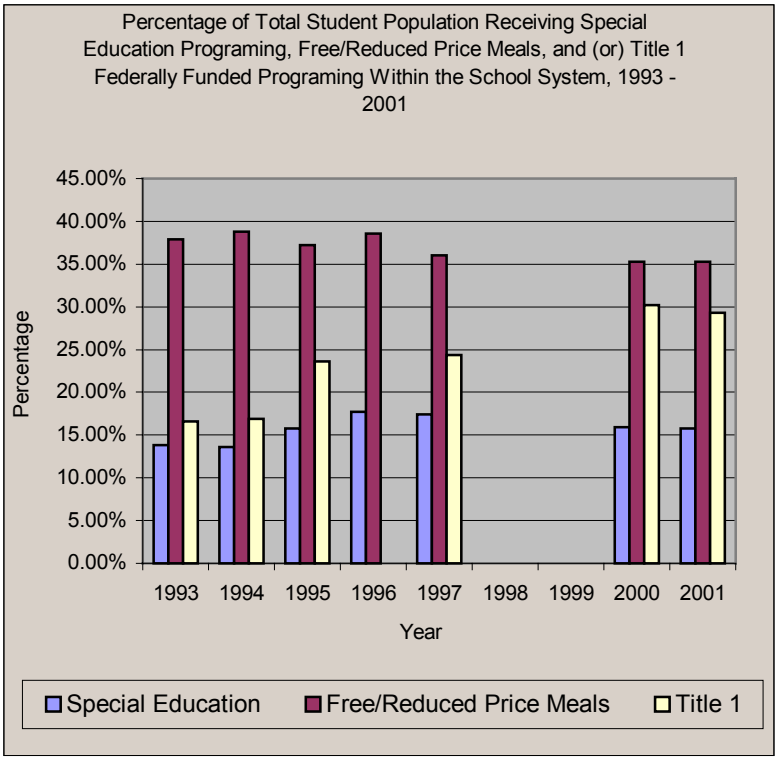


The School System

Federal, state, and local monies funded and continue to fund the city school system. Funding ratios for the past decade show that roughly 60% of school funds for Laurel Falls' school system were provided by local city and county revenue. Statewide, an average of slightly better than 40% of school funding came from local sources.

The city school system continues to receive federal funding for special education, free or reduced price meals, and Title 1 programs. Percentages of students receiving these funds within the city school system since 1993 are listed in Table 3.4. Nearly 35-40% of the total school population qualified for free or reduced price meals, approximately 15% were enrolled in special education programming, and from 16-30% received Title 1 programming from 1993 through 2001.

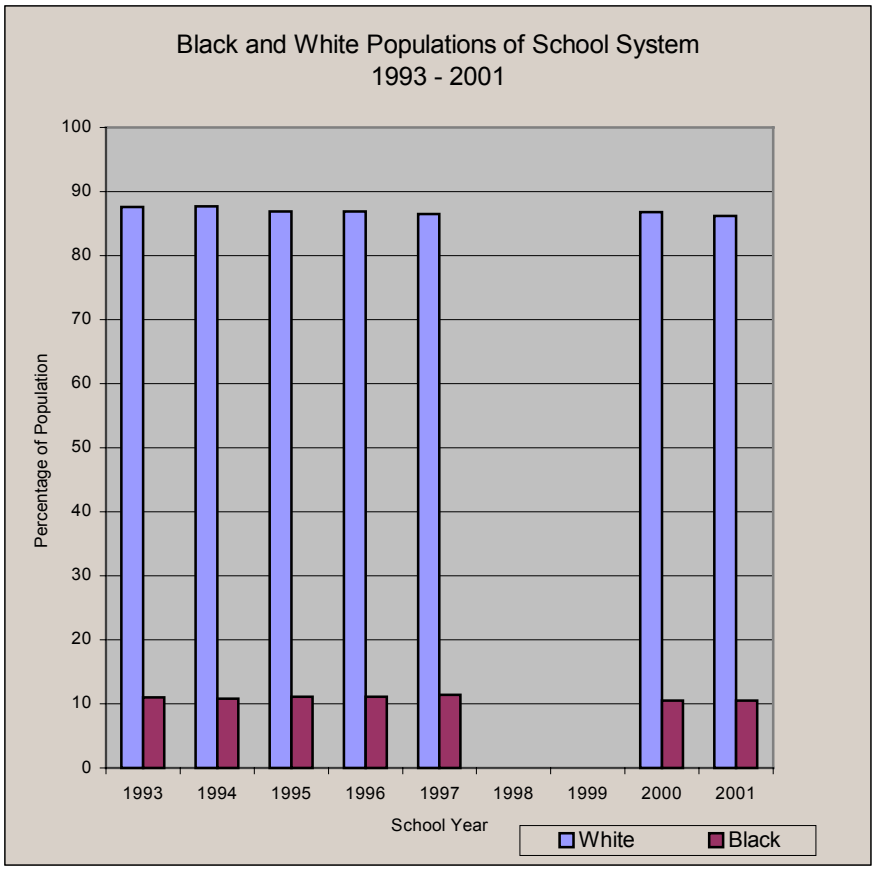
Table 3.4



The student population within the city school system itself numbered approximately 5700 students in the 1989-1990 school year. Student membership in the system had grown fairly steadily since 1985 at a rate of about 5%, and after 1990, the growth rate increased to approximately 10% every five years until the year 2000. Last year, in the 2000-2001 school year, student enrollment in the city system actually fell by about 100 students. The Black/White ratio across the school system fluctuated little over the nine-year period between 1993 and 2001, about 86-87% of the city school students were White, and about 10-11% were Black.

As would be expected, growth within Asian and Hispanic student populations mirrored the growth of those populations in the community at large: the number of Asian students grew by about 75% while the Hispanic student population more than tripled.

Table 3.5



Gifted Programming Over the Years

Gifted programming, as it eventually developed in the Laurel Falls School System over the final quarter of the twentieth century, initially grew from the interest and initiative of a single beginning special education teacher. In an informal interview with one of the system's veteran educators conducted in the spring of 1990, I learned its history. Billie Jones (a pseudonym) began her now 29-year-long career with the system as an elementary schoolteacher, and in the fall of 1976 became a resource room teacher. That year, while concurrently completing coursework for a master's degree in special education, she became interested in gifted education. The acquisition of skills in testing and measurement were also part of her degree requirements. By the end of the year she had conceived the idea of identifying and serving gifted children in her school in addition to the other special populations she served in the resource room program. As her ideas evolved, she discussed her plan with the superintendent and gained his approval to develop referral procedures, test children, and meet with those identified once or twice a week for enrichment in the resource room. The first identification criterion used was a score at or greater than two standard deviations above the mean on an aptitude measure. Within two years, the superintendent, desiring to make services for the gifted available to students in other elementary schools as well, asked Ms. Jones to standardize referral and selection procedures city-wide, identify gifted students, and arrange to have them bussed to her classroom weekly. Thus, the fledgling system-wide pull-out program for the gifted in Laurel Falls was born.

Meanwhile, according to Ms. Jones, educators and legislators across the state were developing gifted and talented programs and enacting state employment standards for those teaching the gifted. As of the early 1980s, teachers serving highly able learners were encouraged to take six hours of college coursework in gifted education, and a state association for the gifted formed and grew in membership. By the fall of 1988, all instructors teaching the intellectually gifted were required to have an appropriate content area endorsement at the appropriate grade level—or hold a special education endorsement—as well as meet state employment standards.

Teachers serving gifted students prior to the 1988-1989 school year were grandfathered in and were able to continue teaching the gifted without meeting state employment standards.

In the 1982-83 school year, Ms. Jones, in concert with other teachers, introduced the Challenge Program, a more highly developed pull-out program designed to serve all elementary school-age gifted children in grades 2-5 city-wide. Identified students were bussed weekly to a single location and participated in a six-week-long enrichment program.

The following year, in 1984, after Ms. Jones met extensively with junior and senior high school teachers and administrators, the Challenge Program was expanded to the junior high and high school. At that time, teachers at the junior high had already conceptualized and begun development of a homogeneously grouped program for students in the highest of three levels in the eighth grade called the American Heritage Program. After Ms. Jones and this core group of teachers modified and articulated curricula and instructional strategies through the grades, the highest level in all academic core classes in each of the seventh, eighth, and ninth grades became Challenge classes at Laurel Falls Junior High. Similarly, Challenge classes in each academic disciplines were offered at the high school.

In the 1982-83 school year, Ms. Jones was asked to be the first gifted coordinator for the system and served in that capacity until the summer of 1989. During this seven-year period, she consulted with elementary, middle level, and high school teachers providing services; developed after-school and summer enrichment programs for identified gifted students; introduced the Odyssey of the Mind competition to interested children who then formed the first OM team in the area; and became active in the state association for the gifted. In the spring of 1987, Ms. Jones made the first of several trips to the state's capitol city to serve on a statewide task force convened to develop differentiated curricula for the gifted.

Although she had left her position as Gifted Coordinator in 1989 to assume responsibilities in her present position as Elementary Education Supervisor in the Laurel Falls School System, she co-chaired the state gifted association conference in 1990. Although

programming for the gifted changed little at the elementary and high school levels in the late 1980s and early 1990s, middle level administrators, in school year 1989-90, began dismantling Challenge Programs in Grades 6-8 by dispersing gifted children among increasingly heterogeneously grouped teams. The homogenization of grade-level teams to promote heterogeneity occurred over a three-to four-year period, depending on the grade level. The Challenge Program at the elementary school has continued operating as it had, and Challenge courses at the high school in the form of Honors and AP classes in various academic disciplines have been offered in Grades 9-12. Beginning in the 2002-2003 school year, however, course levels in English classes are to be collapsed from three to four levels per grade to two level per grade.

The School, Students, Faculty, and Administration

With over 1300 students, Laurel Falls Middle School was a large intermediate-grade school by any standard. In addition to the students, over 90 faculty and staff members worked at the school. The principal supervised three assistant principals who were each assigned the major responsibility of a particular grade level plus various other tasks such as scheduling, personnel records and professional growth, textbook purchasing and distribution, budgeting, and community relations. The primary charge of each grade-level assistant principal was conducting school business for that particular grade, addressing needs of students, faculty, and staff within that assigned grade, and handling discipline for that grade. At the beginning of the year in 1990, the sixth grade student population numbered close to 400 students while the seventh and eighth grades numbered approximately 450 students per grade.

The Participants

Eighth-graders were divided among four four-member teaching teams, and gifted eighth-graders were distributed between two of the four teams. For nine weeks in the spring of 1990, I observed and interacted with all of the 41 identified gifted eighth-grade children at Laurel Falls, their classmates, and their teachers on these two teams, as well as their grade-level principal and associated staff members. Three of the 41 identified gifted children were of Middle Eastern descent, and the rest of them were White. Although 10% of the student population in the school system were Black, none of the gifted cohort were Black. There were 21 boys and 20 girls. Students were observed in each of their academic classes at least three times per class, and in some case more often. Students were also observed in small groups situations in the library and when working in the hall on group projects. After completing all initial class observations, the remainder of my time at the research site was spent interviewing or talking informally with individual students, teachers, and administrators. Also, additional class observations were done as warranted to investigate emergent patterns, ideas, and questions as they arose.

The 41 identified gifted students also completed four separate questionnaires concerning their perception of their achievement, motivation, self-esteem, and peer interaction, and several were personally interviewed. Questionnaires were completed by the students whenever individual teachers could spare instructional time to administer them, usually after a test or on a day that was interrupted by another event or activity. Responses to some of the questions on *Questionnaire A* and *B* are discussed in this document.

To better understand participants' history of involvement and kinds of experiences in homogeneous and heterogeneous grouping structures throughout their school career as well as their level of participation in gifted programming, I asked each to respond to several related questions on *Questionnaire A* (see appendix). First gifted students indicated whether or not they had lived in Laurel Falls all of their lives, and if not, they gave the name of the last place they lived. This was asked to assess how long students had been in the school system. Students then

listed for each school grade the name of the school they attended and the city in which it was located. Finally, next to each grade level, students designated the grouping structure for their class for that particular grade. Prior to administering the questionnaire, I explained each item and answered any questions that the children had about terminology, such as the meanings of the words *homogeneous* and *heterogeneous,* and I also answered procedural questions. Lastly, for each grade of school, students listed any gifted programs that they had participated in and described the program. Shown in Table 3. 6 are percentages of students involved in gifted programming in the Laurel Falls school system at each grade level over the history of the gifted cohorts' school careers.

Table 3. 6

Percentage of Identified Gifted Participants Receiving Gifted Services

Grade	Percentage
Kindergarten	32%
First	41%
Second	44%
Third	63%
Fourth	71%
Fifth	78%
Sixth	83%
Seventh	98%
Eighth	100%

Information represented in Table 3.7 demonstrates a high level of participation in homogeneously congregated groups for many of the students in the gifted cohort. Almost all students had been enrolled in gifted programs before attending Laurel Falls Middle School. The majority had been pulled-out in the higher grades of elementary school, Grades 3-6, and many were placed in accelerated groupings either with classmates in their self-contained, regular classrooms (in-class groupings), or with other "accelerated" students from other classes (between-class groupings). Students were pulled-out or grouped for acceleration, differentiation, and elaboration in many areas including art, computer, English, math, problem solving, reading, science, social studies, and writing. Seven students reported receiving some type of gifted programming every year since kindergarten, and 37% had been in Laurel Falls' school system since kindergarten.

According to school records and students' responses on *Questionnaire A*, city school students in 1990 attended one of nine elementary schools in the system before matriculating on to Laurel Falls Middle School. Six of the nine schools are identified in Table 3.8 by color. The pie chart indicates the school identified gifted participants said they had attended prior to enrolling in middle school. Nearly two-thirds of the participants came either from one of two of the nine city elementary schools—or from private schools. The rest of the cohort came from one of four other city elementary schools. No identified gifted children placed on the two eighth grade teams participating in this study came from the remaining three elementary schools.

Table 3.7: Participants' Pseudonyms and Past Gifted Programming in Grades K-8

#	Pseudonym	In LF System K-8	K	1st	2nd	3rd	4th	5th	6th	7th	8th
1	**Bill**	x				PO-m	PO-m	PO-m	PO-m,r	CH-4	CH-4
2	**Catlin**	x	PO-ds	PO-ds	PO-ds	PO-ds	PO-ds	PO-ds	PO-ds	CH-4	CH-4
3	**Aubrey**			AC-m,r	AC-m,r	AC-all	AC-all	AC-all	AC-all	CH-4	CH-4
4	**Michelle**	x			AC-r	AC-m,r	AC-m,r	AC-m,r	AC-m,r	CH-4	CH-4
5	**Richie**	x	PO	PO	PO	PO	AC-m+PO	AC-m+PO	AC-m,r	CH-4	CH-4
6	**Caryn**			AC-r	AC-m+PO	AC-m+PO	AC-m+PO	AC-m+PO	AC-m+PO	CH-4	CH-4
7	**Mason**	x	PO-r	AC-r	PO-ds	PO-ds	PO-ds	PO-ds		CH-4	CH-4
8	**Stanton**	x	AC-r		AC+PO-ds	AC+PO-ds	AC+PO-ds	AC+PO-ds	AC+PO-ds	CH-4	CH-4
9	**Azariah**						PO-ds	PO-ds	PO-ds	CH-4	CH-4
10	**Ashley**					PO-m	PO-m	PO-r	PO-r	CH-4	CH-4
11	**Alexandra**		AC-r	AC-r		PO-r	PO-ds	AC-r+PO	AC-r+PO	CH-4	CH-4
12	**Lana**	x	AC-r	AC-r	SKIP GRD	PO	PO	PO	PO	CH-4	CH-4
13	**Katherine**									CH-4	CH-4
14	**Ellie**				PO	PO	PO	PO	PO		
15	**Joe**							AC	AC	CH-4	CH-4
16	**Sigourney**	x	PO	AC-m,a	AC-m,r,a	AC-m,a,ps	PO	PO	PO	CH-4	CH-4
17	**Herman**						PO	PO	PO	CH-4	CH-4
18	**John**		AC-r,w	AC-r	AC-r	AC-m,r,e	PO	PO	PO	CH-4	CH-4
19	**Brent**	x					PO	PO	PO	CH-4	CH-4
20	**Lauren**								AC	CH-4	CH-4
21	**Krissy**	x		AC-r		PO-ds			AC-m	CH-4	CH-4
22	**Lee**		CLUSTER						PO	CH-4	CH-4

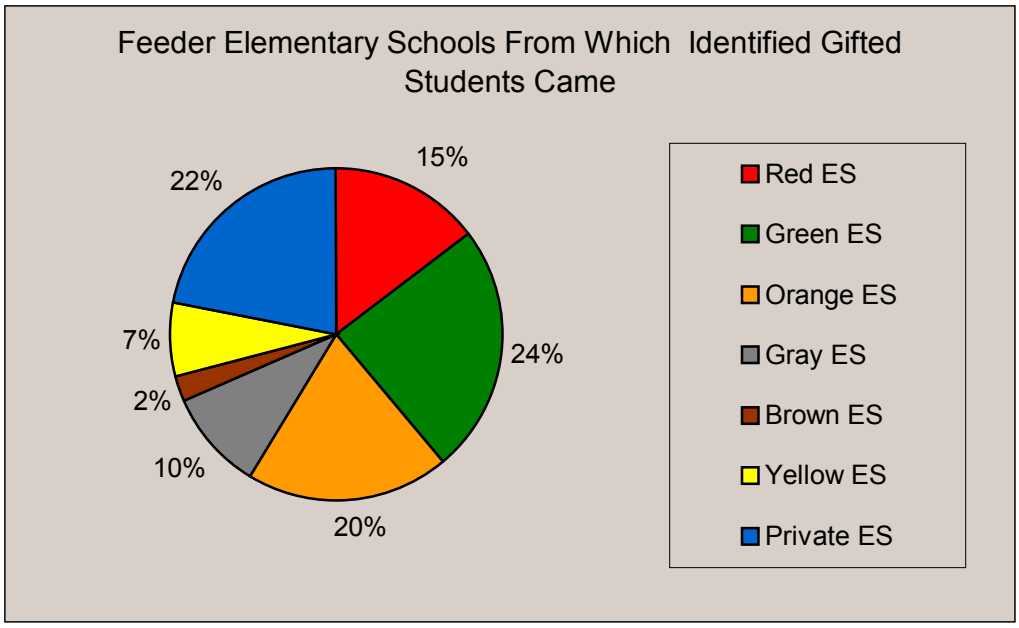
Key: AC = Accelerated Program, CH-4 = Challenge in m,s,e,ss, PO = Pullout Program, TAG = Talented & Gifted Program, CLUSTER = Cluster Group, MONT = Montessori School, RES = Resource, SKIP GRD = Skip Grade, a = art, c = computer, ds = different school, e = English, m = math, ps = problem solving, r = reading, s = science, ss = social studies, w = writing

Table 3.7: Participants' Pseudonyms and Past Gifted Programming in Grades K-8 (continued)

#	Pseudonym	In LF System K-8	K	1st	2nd	3rd	4th	5th	6th	7th	8th
23	**Rory**									CH-4	CH-4
24	**Bruce**					PO-ds	PO-ds	PO-ds	PO-ds	CH-4	CH-4
25	**Scarlet**	x		AC-r	PO	PO	PO	PO	PO	CH-4	CH-4
26	**Boone**	x		AC-m				AC-m	AC-s	CH-4	CH-4
27	**K.T.**						AC-m	AC-m,r	AC-m,r+PO	CH-4	CH-4
28	**Meggin**		AC-m,r	AC	AC	PO-a	PO-a	AC-r,e,c	AC-r,e,c	CH-4	CH-4
29	**Kate**		AC-m,r	MONT	MONT	MONT	MONT	AC-all	AC-all	CH-4	CH-4
30	**Warren**	x			PO	PO	PO	PO	PO	CH-4	CH-4
31	**Elvin**									AC-m	CH-4
32	**Michael**	x			PO-ds	PO-ds	PO-ds	PO-ds	AC-m	CH-4	CH-4
33	**Mary**		AC-r			AC-r	AC-r	AC-r	AC-r+PO	CH-4	CH-4
34	**Dale**					AC-library	PO	PO	PO	CH-4	CH-4
35	**Jacque**									CH-4	CH-4
36	**Jim**								AC-m	CH-4	CH-4
37	**Samantha**										CH-4
38	**Bart**				AC-all	AC-all	AC-all	AC-all	AC-all	CH-4	CH-4
39	**Ben**	x		AC-s	AC-s	AC-s	AC-s	PO	PO	CH-4	CH-4
40	**Selene**		AC-m	AC-m				AC-m		CH-4	CH-4
41	**Nick**			PO-r	PO-r	PO-r	PO-r	PO-m	PO-m	SKIP GRD	

Key: AC = Accelerated Program, CH-4 = Challenge in m,s,e,ss, PO = Pullout Program, TAG = Talented & Gifted Program
CLUSTER = Cluster Group, MONT = Montessori School, RES = Resource, SKIP GRD = Skip Grade, a = art, c = computer
ds = different school, e = English, m = math, ps = problem solving, r = reading, s = science, ss = social studies, w = writing

Table 3.8


Feeder Elementary Schools From Which Identified Gifted Students Came
15%
24%
20%
10%
2%
7%
22%
Red ES
Green ES
Orange ES
Gray ES
Brown ES
Yellow ES
Private ES

CHAPTER 4

REFINING THE QUESTION:

HISTORY, THEORY, PHILOSOPHY, RESEARCH

If no one asked the question, what would the answer be? --Gertrude Stein

Our understanding of issues concerning the grouping of children in schools is ever-evolving and, like most inquiries that really matter to people, often provokes debate among parents, teachers, scholars, policy makers, and, at times, among the children being grouped themselves. Since the beginning of American schooling, children have been assigned to different configurations for various reasons including age, gender, race, socioeconomic status, ability, curriculum preference, random selection, teacher assignment, and scheduling error, to name a few. Though all of these reasons must have appeared legitimate to those making grouping decisions at different times in the past history of American schools, with continued development and implementation of policies supporting democratic principles in our society and its educational institutions, several of the preceding reasons for grouping were called into question—and thus provided catalyst for change.

So how does grouping impact schoolchildren, and specifically gifted children, and how then should we group them for instruction in this millennium? Recent reviewers of research on ability grouping report that, still, hundreds of studies later, results from research attempting to measure or describe the impact of ability grouping or tracking on education are frequently summarized as being inconclusive (Loveless, 1998; Stroud, 2002). And Karen Rogers (1998), before delineating her conclusions following her review of findings of two recently conducted ability grouping meta-analyses as well as 26 single grouping studies that were reported in the

general literature between 1992 and 1998, noted that "the focus of these studies has not differed greatly from the earlier period [before 1992]—we seem to be asking the same questions about grouping, even though our clientele may have changed" (p. 40). We know we need more specific and conclusive information, we know we need new questions, and we know change will and probably should occur as a result. We must continue to refine the question. By distilling it through history, theory, philosophy, research, or experience, and the experience of the children themselves, we can hope that new questions will surface—better questions—questions that might lead us to the answers we seek.

History and Theory

A beginning point for the reporting of grouping practices, particularly ability grouping in America, was the year 1867, when students in St Louis, Missouri, were said to have been grouped by academic achievement or intellectual ability (Manning & Lucking, 1990). Less than ten years earlier, Charles Darwin (1859) reported his study of the origin of the species; and only two years after that, Darwin's cousin, Francis Galton (1869), published his study of the heritability of human intelligence. Galton's work, according to Clark (1983), is extremely important to those interested in intelligence theory (and concomitantly intelligence testing and grouping according to intelligence) because no one in recent history, prior to Galton, had studied intellectual differences in human beings. And, because Galton, who was influenced by Darwin, focused on the heritability of intelligence rather than on environmental effects, his long-lasting theory that intelligence is fixed emerged and took hold. One's intelligence at birth, he thought, remained intact until death. Interestingly, although the idea of fixed intelligence is now considered a somewhat limited conception of intellectual development, most scientists and researchers accepted it for nearly a century. One who actually challenged it was Alfred Binet, the French pioneer of intelligence testing (Clark, 1983).

In 1905, Binet, who had been called on by the French government to assist with the identification of slow-learning children, developed instruments to separate them from other children so that special curricula could then be created to help them learn. Unlike Lewis Terman, who in 1921 revised Binet's intelligence scales to create the Stanford-Binet Intelligence Scale, Binet did not believe in the concept of fixed intelligence and instead considered intelligence educable. The fixed intelligence theory prevailed, however, and was not seriously challenged again until 1960 (Clark, 1983).

In the 1960's, what is perhaps the most obvious recent benchmark in the evolution of grouping practices in American schools was published. Equality of Educational Opportunity, a government-funded survey (1966) also referred to as the Coleman Report after the director of the study, James S. Coleman, redefined prior ideas about grouping structures in schools, created unprecedented interest in grouping issues and, most importantly, generated new questions about how grouping impacts children (Dentler, 1966; Dyer, 1968). Today, thirty-six years later, we are still wrestling with those questions. Key to finding acceptable answers to complex problems like how we may best group children in schools to maximize physical, mental, and moral development (Durkheim, 1956) in all children is maintaining a clear focus on the question. Furthermore, because of the complex nature of the question, it and all related subquestions must consistently be refined. Before we can make knowledgeable decisions about how to group children in school, we must first know the historical and theoretical context from which the question comes, the philosophy and research driving the question and attempts at answering the question, and what grouping options are available. Then, we must also be able to describe, in detail, how different grouping structures impact specific groups of children—such as the gifted and talented.

While the amount of literature on grouping practices and grouping effects on children of lesser academic ability is considerable (Rogers, 1993; Stockard and Mayberry, 1992), particularly

for overall achievement effects, much specific information is still to be learned including how these children develop in optimally arranged grouping structures (Hallinan, 1987). In contrast, the available literature on particular grouping practices and their specific effects on gifted children, though growing (Brewer, Rees, Argys, 1995; Hoffer, 1992; Rogers, 1998; Sayler & Brookshire, 1993; Shields, 1995) is sparse in comparison. Moreover, researchers in the field of gifted education question whether results from several existing grouping studies have been over-generalized for the gifted (Demirsky Allan, 1991; Robinson, 1990; Rogers, 1993). Equally limited is information on grouping practices and their specific effects on gifted middle school children (Tomlinson, 1994).

Background: Grouping and the Sociology of Education

From the fields of sociology and sociology of education, one may glean theoretical underpinnings essential to gaining a broad understanding of how grouping structures for gifted children in American schools have evolved. Because sociologists are interested in group life, and the educational sociologist, the group life of children and others in schools, considering sociological theory is a logical step in determining how and why schoolchildren have been grouped for instruction.

In a brief overview of the field of sociology, Ballantine (1983) divided specialties within the field into studies of institutions in society, studies of processes, and studies of other group-related situations. Five major institutions constituting subject areas in sociology and representing the structure of society are family, religion, education, politics, and economics. Part of the structure of society and its institutions are formal, complex organizations such as schools. Processes, the action part of society, give life to the structure. Through two of these processes, socialization and stratification, people learn roles expected of them and determine where they fit into the social structure.

The importance of the interdependent relationship between society and schools began with Emile Durkheim (1858-1917), professor at the Sorbonne in Paris and the person considered to be the first to recommend that a sociological approach be used in the study of education (Ballantine, 1983). In one of three major collections of his writings, Moral Education (Durkheim, 1961), The Evolution of Educational Thought (Durkheim, 1977), and Education and Sociology (Durkheim, 1956), he defined education and outlined the concerns of sociology:

> Education is the influence exercised by adult generations on those that are not yet ready for social life. Its object is to arouse and to develop in the child a certain number of physical, intellectual, and moral states which are demanded of him by both the political society as a whole and the special milieu for which he is specifically destined...." (Durkheim, 1956)

Of interest to the educator today is Durkheim's equal emphasis on the development of physical, moral, and intellectual states. With the recent emergence of theories (e.g., Gardner, 1983) expanding the concept of intelligence to include giftedness or "intelligences" in areas beyond academic ability, such as psychomotor or psychosocial giftedness, this equal emphasis among the three states is particularly relevant.

In another discussion of the function of the school and its relationship to society, Durkheim emphasized the transference of moral values within the family structure and within the school (1961). Moral values, he wrote, are the foundation of the social order, and society is perpetuated through its educational institutions. Consequently, changes in society are reflected in education. Likewise, changes in education are reflected in society. Today consideration of moral values comes into play in a very real way when we must decide how children are grouped in schools, when we must define equity in schools, and now, within our increasingly multicultural society, when we must decide what moral values can be considered universal or standard.

Three Theoretical Perspectives: Frames for Considering Grouping Structures for the Gifted

Three theoretical perspectives developed in the field of sociology that can provide a frame for thinking about the grouping of gifted children are functionalist theory, conflict theory, and interaction theory. These are intellectual structures or guides that provide a basis or beginning point and continuing context by which those interested in a particular problem may examine it. When considering the concept of grouping gifted children and how grouping, especially homogeneous grouping, affects them, all three of these theories, though sometimes seemingly antithetical, are useful.

Interspersed throughout the following discussion of these theories are references to a study commissioned by President Johnson in the 1960s called the report on Equality of Educational Opportunity, commonly referred to as the Coleman Report. Described by Dentler (1966) as a "contribution to the study of intergroup relations second only to Myrdal's American Dilemma" (p.27), the Coleman Report and findings represent a benchmark in the study of grouping structures in schools.

As Mosteller and Moynihan (1972) describe it, during the 1950s and 1960s several fortuitous social events coincided in time and space to produce a general transformation in U.S. society leading to a greater consciousness of humanity—one in which people became more aware not only of their own societies but of the larger "sociosphere" of which they were a part (p. 3). Essentially, at this time in U.S. history, two great forces radically impacted American society and issues of groups and grouping:

> A combination of political, economic, and social events led to unprecedented national commitments to restructure the society so as to overcome the injustices and instabilities associated with the historic problems of poverty and race. Simultaneously the methodology of the social sciences made rapid advances, primarily those associated with the development of the high-speed computer, so that large-scale, complex investigations

> became possible to a degree that had never previously existed. In the words of Karl Deutsch, a "revolution of competence" occurred. (Mosteller and Moynihan, 1972, pp. 3-4)

The preceding authors began the introduction to their book of papers from a Harvard University seminar on the Coleman Report with a quote from W. B. Yeats: "Science is the criticism of Myths" (Ellman, 1964, p. 234). I can only say that, as they wrestled with social myths while criticizing what was "almost certainly the most important effort of its kind ever undertaken by the United States government" (Mosteller & Moynihan, p. 4), so do we continue in their efforts thirty-six years later. Ironically, some of the "myths" educators of the gifted contend with now may be rooted in the controversial findings of the Coleman Report.

Functionalism

Functionalism, sometimes referred to as structural-functionalism, consensus, or equilibrium theory, is built on the idea that society, its institutions, and education are a macrocosm made up of interdependent parts which work together (Ballantine, 1983). The society or any of its institutions survives because each part of the whole relies on the others within it and complements them. The degree to which each component of the system is integrated with the others dictates the overall stability and balance of the system. Functionalist theory, therefore, provides a concept of cooperative interdependence, is based on the idea of balance, and emphasizes maintaining the status quo. This theory is especially helpful when thinking about early forms of and reasons for grouping in schools. Once results were in from the Coleman study (1966) and then later when Goodlad's A Place Called School (1984) and Oakes' Keeping Track: How Schools Structure Inequality (1985) were published, assertions resounded that maintenance of the status quo had been a driving force behind grouping decisions in schools, particularly

before, during, and immediately following desegregation. Questions arising soon thereafter as to the morality of the status quo being maintained through grouping in schools brings the next theory into play.

Conflict Theory

Conflict theory began with the writings of Karl Marx and Max Weber. An assumption held by conflict theorists is that a certain tension in society, a constant struggle between the "haves" and the "have nots," not only exists but also drives the society or any of its institutions. As different factions of the social hierarchy vie for such things as material goods, status, influence, and power, this struggle produces continual change in the power structure. When those in control, the "haves," are successful in maintaining their position of power, change in the social structure may appear to be slower. When those challenging the status quo, the "have nots," are successful in overthrowing existing power structures, change is more visible and may appear to be more rapid. Conflict theory, therefore, provides a concept of competition, and isolationism and is based on the idea of continual change in society.

The conflict theorist's perspective is interesting when thinking about the controversy and debate over the meaning and interpretation of research on equality of educational opportunity conducted in the 1960s, the part grouping would ultimately play in that debate, and the overall effect this relationship, formed between the ideas of equality of education and grouping, would have on grouping decisions in educational institutions thereafter. Whether justified or not, from this point in history on, the words "equality" and "grouping" would be inexorably linked.

When publication of the Coleman report (1966) brought to the forefront considerations of equality in education or equality of educational opportunity, with it also came some unexpected results and rather confusing interpretations of those results. As described by Hodgson (1975), professor James S. Coleman was charged by the Johnson administration to conduct an extensive,

government-funded survey of "the lack of availability of equal educational opportunities" by reason of race, religion, or national origin. Later Coleman predicted in an interview, half way through the study, that "the study will show the difference in the quality of schools that the average Negro child and the average white child are exposed to." He then remarked, "You know yourself that the difference is going to be striking" (Hodgson, 1975).

In keeping with the beliefs of many other sociologists of the day, Coleman's comment supported a universally accepted proposition of a direct correlation between inequality in schools and inequality in society. A great deal of evaluation and re-evaluation of politicians', educators', and scholars' positions, theories, and assumptions must have occurred when the results came in, and Coleman's prediction was considered at once wrong, right, and inconclusive. When his conclusions were interpreted by Jencks, Coleman's prediction was considered wrong (1972); according to Dentler's (1966) interpretation of the results, it was right; and based on Dyer's (1968) critical review of the data and methodology, it was thought inconclusive. Perhaps even more interesting than figuring out whose interpretation was most accurate, is considering why questions addressed in one 737-page report and their accompanying data, analysis, and conclusions could and would be interpreted so differently.

In his reanalysis of the Coleman data, funded by the Carnegie Corporation and U.S. Office of Economic Opportunity, Jencks (1972) listed four major conclusions from the Coleman report:

1. Most black and white Americans attended different schools.
2. Despite popular impressions to the contrary, the physical facilities, the formal curricula, and most of the measurable characteristics of teachers in black and white schools were quite similar.

3. Despite popular impressions to the contrary, measured differences in schools' physical facilities, formal curricula, and teacher characteristics had very little effect on either black or white students' performance on standardized tests.
4. The one school characteristic that showed a consistent relationship to test performance was the one characteristic to which poor black children were denied: classmates from affluent homes. (p. 69)

In a special review, Dentler (1966) reported these findings from the Coleman Report:

1. In the metropolitan North, Negro and Puerto Rican pupils, as compared to white pupils, attend school in older, larger, more crowded buildings. They have access to fewer laboratories and library books, auditoriums and gymnasiums. (p. 190)
2. Their elementary teachers show a slightly lower score on a short vocabulary test. Even their cafeterias and athletic playing fields are in shorter supply. (p. 190)
3. Accelerated programs for rapid learners are typically more available to white than to Negro or Puerto Rican pupils, as are course opportunities for 12th graders to obtain advanced placement or college credit. (p. 190)
4. The Coleman data are comprehensive enough and the findings distinct enough to release us from endless cycling on questions of public educational services. <u>Facilities, staffs and services are distributed unequally</u>. (his emphasis, p. 191)

These two researchers do agree on the Coleman Report's results on the topic of peer relationships and access to peers from higher socioeconomic groups. As Jencks (1972) pointed out in his analysis, the most important difference contributing to variation in students' achievement among black and white children was access to (being in classes or grouped with) more affluent classmates. Dentler (1966) also emphasized this difference:

> The backgrounds and attitudes of peers also strongly affect school achievement.... Individual achievement is facilitated when a student attends school with peers who are socioeconomically advantaged, whose parents are more interested in school success, and whose mobility is low. Achievement is dampened for students whose parents are less interested, and whose movement from school to school or community to community is high. Moreover, Negro and Puerto Rican students are more affected than Northern whites by this peer influence. (p. 197)

Though Dentler disagreed with Jencks and stipulated that, according to the report, services in schools were unequal, he qualified this point with the following statement:

> What the child brings with him to school as strengths or weaknesses determined by his social class is the prime correlate of school achievement. It is influenced—offset or reinforced—most substantially not by facilities, curriculum, or teachers but by what other pupils bring with <u>them</u> (his emphasis) as class-shaped interests and abilities. In practical terms, as the proportion of white pupils increases in a school, achievement among Negroes and Puerto Ricans increases because of the association between white ethnicity and socioeconomic advantage. (1966, p.197)

The significance of the debate over the Coleman findings and turns that it took to issues affecting grouping of the gifted is obvious. If political and social forces affecting decisions on grouping structures for the gifted had ever been ill-defined, a clear relationship between academic achievement for those in lower socioeconomic groups (often minorities) and access to or being in classes with peers from higher socioeconomic groups (generally whites) had been drawn. The wider context, the moral element bearing upon decisions affecting the grouping of the gifted, had been publicly proposed and readily accepted and supported by some. Yet Dentler went on to raise some relevant questions:

> We are more certain than ever that the peer environment, including racial mix, is a social determinant of school achievement, but we know very little about the particulars of this environment in the elementary or junior high school.
>
> What blend of social heterogeneity is optimal under what conditions of age, past school experience, and so forth?
>
> What is the nature of the "within-school" stratification system? How do principals and teachers sustain it and thus reinforce selectively the achievement of some students, perhaps at the expense of the retardation of others? Could one redesign this reward structure? How far can one depart from the stratification system of the larger community and still operate a neighborhood public school? (1966, pp. 187-198)

Also contributing to the complexity of the equal opportunity debate and the meaning and interpretation of the Coleman Report was the analysis of Henry S. Dyer. In a critical review of the Coleman Report data and methods, Dyer (1968) focused on the effects of various school characteristics such as per-pupil expenditure and student body composition. In his discussion of student-body correlates, he stressed that in no way could his analysis support the flat assertion found in the summary of the Coleman Report that "if a minority pupil from a home without much educational strength is put with schoolmates with strong educational backgrounds, his achievement is likely to increase" (Coleman et al., 1966, p. 22.):

> Quite the contrary. There is nothing whatever in the Coleman analysis that can justify such an inference. The Coleman study contains no data at all on the effects that might accrue from "putting" minority pupils with different kinds of schoolmates. It is one thing to suppose that a pupil's attitudes and behavior reflect those of the peer group in which,

> because of innumerable circumstances, including possibly his own predilections, he happens to be; it is quite another thing to infer that if he is moved from one group to another, his attitudes and behavior will change in predictable ways. This is not to say that changing the mix of children in a school will not change the children in the mix; it is merely to call attention to the fact that the Coleman data, by their very nature, are incapable of providing any information at all on what changes will occur or the likelihood of their occurrence. (p. 212)

Most important about Dyer's review and consideration of the meaning and interpretation of the controversial findings of the Coleman Report was his thoughtful qualification of what the Coleman Report was: how we could best view it and its findings, and how it could best be used to advance educational theory and practice:

> In a word, the data in the Coleman Report can be a rich source of educational ideas to be tried out--of hypotheses to be tested--but always with the reservation that actual outcomes may be the reverse of expectation. The same data, however, cannot and should not be regarded as sure determiners of educational policy and practice. This is no doubt a hard saying for those who insist that only certainties are acceptable in the conduct of schools. But until educators and the makers of educational policy can get used to a perpetual trial-and-error process, there is little likelihood that the educational enterprise will ever be liberated from the routines in which it seems now to be frozen. (1968, p. 212-213)

Dyer's warning against seeking hard, fast rules for educators based on the Coleman data (or any data, for that matter), though written three and a half decades ago, is quite timely today when thinking about the same issues of grouping that he discussed above. Yes, more research has been done since then. Yes, the tendency to overgeneralize research information, particularly for

the gifted population, has persisted. Many school systems are presently dismantling homogeneously grouped programs for all of their students based on research that informs some questions but fails to address others (Benbow, 1992). Dyer suggested that it is the very complex nature of grouping that makes it so difficult to evaluate or understand:

> There are innumerable ways of placing pupils in tracks and of organizing the activities that go on between teachers and pupils after they have been so placed. All research on the subject has been quite inconclusive for the very reason that the researchers have failed to observe, in any systematic fashion, how teachers actually organize instruction and how pupils actually learn under various conditions of grouping and nongrouping. (1968, p. 213)

A key word in Dyer's statement is the word "how." Before homogeneous grouping can be discarded for all age groups and ability levels as ineffective, inappropriate, or even immoral, we must gain a microcosmic rather than macrocosmic understanding of <u>how</u> children are learning and developing (or not learning and developing) within a particular grouping situation. Likewise, though much of the more recent research on heterogeneous grouping structures indicates achievement gains, particularly for those in lower ability or socioeconomic groups, we must explore <u>how</u> children are learning and developing (or not learning and developing) in these grouping situations as well.

Interaction Theory

Following World War II, many sociologists became more interested in social-psychological questions and began to focus on interactions among groups. In schools, sociologists of education studied interactions between school-age peers, teachers and students, principals and teachers, principles and students, and so forth (Ballantine, 1983). In the early

1970s, several British sociologists questioned exclusive reliance on macrocosmic approaches and instead began to emphasize microcosmic approaches such as symbolic interactionism, ethnomethodology, and phenomenology.

These ways of looking at interactions of people within societies stress the value of understanding people's common-sense views of reality. Looking closely at how people involved in schooling view everyday items placed in a classroom demonstrates how peoples' common-sense views of reality can differ markedly. For instance, policy makers whose interest is demonstrating to the local constituency that the school system is both progressive and innovative, may forego hiring new teachers to place televisions and video players, or in policy makers' eyes, modern technology, in every classroom. Teachers in the schools, on the other hand, who have a resultant overabundance of child bodies in their classrooms along with the overwhelming paperwork they generate, may view the television and video player in their classrooms in a totally different light. To them the equipment may be considered a tool of self-preservation, while students who already watch television and videos at home to relax may view school video time as a good time to catch up on lost sleep. In the interaction theorist's perspective, it is essential to develop a clear understanding of how people view events and situations in which they participate and determine, as far as possible, how and why they react to them as they do. To interaction theorists, understanding the macrocosm of systems such as an educational system depends on establishing explicit meanings of interactions within that system. Study at this microcosmic level is what can address Dyer's "how" question about effects of homogeneous versus heterogeneous learning.

Research to date has provided much information detailing effects of certain grouping structures on certain groups of children, particularly in relation to their achievement. But what actually goes on in these grouping structures? How do children interact with one another in certain grouping situations? How do children react to these interactions, especially between

peers, within these groups? How do these interactions affect specific children's motivation? How do these interactions affect specific children's self-esteem?

The microcosmic view, relied on by interactionists, can further refine all three theoretical perspectives outlined previously and advance our current concept and understanding of how different grouping structures affect the peer-interaction, motivation, and self-esteem of gifted children.

Recognizing the Gifted and Talented

Merely acknowledging giftedness and talent in schools and charging schools with assisting gifted and talented children in developing their abilities is supportive of tenants of functionalist theory. From the functionalists' perspective, one purpose of schools is to provide children a transformation mechanism whereby they can move from life in the family to life as an adult in a modern industrial society (Fienberg & Soltis, 1985). This is somewhat reminiscent of Durkheim's statement cited earlier. These children may then fulfill differentiated roles that contribute to the society as a whole. Another purpose of schooling, according to many functionalists, is to teach children to accept norms supportive of economic and political life in modern society. Dreeben (1968) says that children assimilate four chief norms as they pass from lower to higher grades: "independence," "achievement," "universalism," and "specificity." When children begin to take responsibility for their own actions and acknowledge that others have the right to hold them accountable, they have learned independence. When children learn that they will be judged according to performance, and not by effort or good intentions, they have learned achievement. When children understand that members of a specific group are treated uniformly, they have learned universalism. And when children learn that legitimate exceptions can be made in otherwise uniform treatment of a specific group, they have learned specificity.

These norms, which are developed in schools, can then be related to another functionalist concept—the ethical principal of equal opportunity. The idea of equal opportunity, say Feinberg and Soltis (1985), is that individuals are chosen for certain roles in society and rewarded within those roles on the basis of their achieved rather than ascribed characteristics. Whenever family background is the only basis for which individuals gain political office, income, or rights, these rewards are being distributed according to ascribed qualities. On the other hand, when individuals gain political office, income, or rights based on performance or achievement, their rewards are being distributed according to achieved qualities. As Feinberg and Soltis (1985) explained,

> In most instances people will identify social-class background, race, religion and sex as irrelevant, ascribed characteristics, and they will identify talent, ability, and motivation as relevant, achieved ones. (p. 21)

These authors also give three reasons for the movement in modern societies from ascribed to achieved rewards:

> First, it is thought that the ever-expanding skills required by industrial society often render obsolete the skills passed on by the family or the local community. Thus, to reward qualities that have been passed on from one generation to the next may well be to retard the development of the new knowledge and skills required to meet modern needs. Second, the expanding need for new skills requires that opportunities be opened to talented people from groups that have traditionally been denied them. Third, political stability requires that those who have not been rewarded, as well as those who have, believe that they competed under a fair system of rules. Thus, the ideal of equal opportunity is thought to be not only ethically sound but also consistent with the requirements of stability in modern society. (Feinberg & Soltis, 1985, p. 21)

Within this explanation there appears to be a very necessary balance between societal support of the development of achieved characteristics, and opportunity being opened to all talented people to develop that talent. In sum, three underlying constructs within the functionalist paradigm and the principle of equal opportunity are

1. reward based on achieved rather than ascribed characteristics
2. societal support of the development of talent
3. equal opportunity to develop talent

Therefore, recognizing, developing, and rewarding achieved talent in schools and society is consistent with structural functionalist thought. Furthermore, at the center of the principal of equal opportunity is societal support of all gifted and talented individuals and societal support for the development of their promise to high levels of performance.

What is Talent and Giftedness?

Before a society can support the development of talent, and provide equal opportunity among talented individuals to do so, a definition of giftedness and talent must be stipulated in order to identify those individuals. In 1972, the Marland Report set forth the following definition:

> Gifted and talented [author's emphasis] are those...with demonstrated achievement and/or potential ability in any of the following areas: (a) general intellectual ability, (b) specific academic aptitude, (c) creative or productive thinking, (d) leadership ability, (e) visual and performing arts, and (f) psychomotor ability. (p. 2)

Although this differential conception of giftedness was proposed and accepted by educators and legislators thirty years ago, it has never been fully implemented in practice (Feldhusen, 1995).

Instead, a global conception, a general, all-purpose idea of giftedness has been used to identify the gifted and talented in schools. This has been done using multiple measures of intelligence, school achievement, and sometimes ratings of "gifted behaviors" to formulate a single index of giftedness. But, as Feldhusen says, "little effort was made to identify or diagnose a child's specific talents, aptitudes, or abilities or to design instruction to meet specific needs" (p. 10). Now, with new recognition of the need to acknowledge giftedness and talent beyond that measured with a pencil and paper test, combined with an increasing awareness of the need for better means of identifying talented people from all social strata, the limitations of the global conception of giftedness are evident. If present and future schools and school personnel were more dedicated to developing and valuing specific types of talent rather than the global giftedness serviced over the past two decades, perhaps dissent over grouping structures would decrease. By making greater effort to identify specific strengths in each child, more opportunities for inclusion in specialized programs for distinct talents would be available to more children. It also follows that with a differentiated conception of giftedness and talent, more accurate identification procedures would be required to identify specific talents at the earliest school age possible, and greater opportunity would be available to more children to acknowledge and develop their own individual gifts. Clearly, a review of the original differentiated conception of giftedness and talent is in order.

If developing talent among all individuals with great promise is the goal of our society, we must (1) be able to identify as many talented people as possible among all social groups and (2) have the foundation of appropriate theories of intelligence and talent development to guide educational and legislative decision making for the gifted and talented. Before grouping decisions can be made for any children, we must be aware of each child's unique talents and understand how those talents can be enhanced in particular grouping structures using specific instructional techniques. Lasting and constructive school policy cannot be built without the

underpinnings of sound theory. Gardner's (1983) theory of multiple intelligences and Bloom's (1985) study of talent development will no doubt contribute to the construction and refinement of a theoretical framework for the grouping of gifted and talented children.

Gardner's Multiple Intelligence Theory

The theory of multiple intelligences articulates well with the identification criteria in the Marland Report because both the theory and the definition assume the existence of distinct or differentiated forms of intelligence or giftedness. In Frames of Mind, Gardner (1983) outlined seven distinct human abilities—linguistic, spatial, musical, bodily kinesthetic, logical mathematical, intrapersonal, and interpersonal. These were the end product of his attempt to "expand and reformulate our view of what counts as human intelligence," (p. 4)—to create a view of intelligence incorporating a wide range of abilities.

In challenging the global conception of giftedness described by Feldhusen (1995) as pencil and paper giftedness, or "an hour's worth of questions yielding one round number" (p. 4), Gardner proposed a new, differentiated way of thinking about talent and the identification of talent. He arrived at this revisionist theory of intelligence by reviewing a large group of unrelated sources: gifted people, brain-damaged patients, "idiot savants," normal children, normal adults, experts in different lines of work, and individuals from diverse cultures. Then after analyzing information from these diverse sources, evidence validating particular intelligences emerged. A specific intelligence gained legitimacy and was said to exist

> to the extent that it can be found in relative isolation in special populations (or absent in isolation in otherwise normal populations); to the extent that it may become highly developed in specific individuals or in specific cultures; and to the extent that psychometricians, experimental researchers, and/or experts in particular disciplines could

> posit core abilities that, in effect, defined the intelligence. Absence of some or all of these indices, of course eliminates a candidate intelligence. (Gardner, 1983, p. 9)

Although Gardner's list of intelligences and the identifiers of giftedness listed in the Marland report are in no way a perfect match, the importance of giving much consideration to Gardner's theory, as well as returning to a differentiated conception of giftedness and talent like the one described in the Marland report, is that each, by focusing on distinct and individual strengths supports a broad and multifaceted view of human ability.

Bloom's Study of Talent Development

Another researcher with the assumption that each ability is relatively independent of the others is Benjamin Bloom. In a four-year study of the development of talent in children, Bloom (1985) and his research team interviewed 120 extremely talented individuals who were considered by experts, teachers, and scholars to be among the top twenty-five persons in their particular fields. Those interviewed about their childhood and the development of their talent were pianists, sculptors, Olympic swimmers, world-class tennis players, mathematicians, and research neurologists.

After analyzing these gifted individuals' responses, Bloom and his fellow researchers detected three distinct stages in the development of talent. Results also clarified parents' and teachers' roles in the development of talent. The following is a brief listing of Bloom's findings. The categories entitled "Parents," "Early Years," and "Later Years" are used mainly to provide a context for the "Middle Years" category that is most germane to this discussion.

Parents

1. Though they differed greatly in their levels of education, professions, socioeconomic status, and avocational interests and activities, parents of these children were "child-oriented" and genuinely wanted to do their best for their children at all stages of their development.
2. Parents devoted considerable amounts of time, energy, and resources to their children.
3. Parents modeled the work ethic and did their best in whatever they tried.
4. Parents gave their children appropriate responsibilities in the home to teach them self-discipline.
5. "To excel, to do one's best, to work hard, and to spend one's time constructively were emphasized over and over again." (p. 519)
6. Parents' recreational activities, interests, or hobbies—parent play—had great impact on many of the children studied.
7. Parents encouraged their children to be curious and answered their questions carefully and patiently.

The Talented Children's Early Years

1. In the early years the talented children generally viewed development of their talent as play.
2. Prior to any sort of lesson in their talent field, most of the children had already gained some initial skill from parents, older siblings, or friends of the family.
3. First teachers were usually selected out of convenience or proximity to the home.
4. In no cases were the first teachers as outstanding in their talent fields as their students eventually became.
5. "...in most cases the teachers were almost perfect for young people. They liked children and rewarded them with praise, signs of approval, or even candy if they did anything right. They were extremely encouraging . . . they made learning at the beginning of this stage much like a

game . . . teachers were skillful in helping the child make progress over relatively short periods of time . . . [teachers] helped them grasp the larger patterns and processes in the subject and encouraged them to 'discover' the underlying ideas and processes." (p. 517)

6. Practice routines during this stage were monitored, reinforced, and rewarded by parents. Parent approval, acclaim, and some material rewards were motivators to continue.

The Middle Years

1. A mark of this stage was the search for a new teacher, the best available in the area.
2. This teacher required evidence of ability, seriousness, discipline, and strong interest in the talent field. Costs for lessons rose, sometimes dramatically.
3. The second teacher "usually taught only the outstanding students in the talent field and they expected some of them to reach very high levels of attainment. They were perfectionists who...demanded a great deal of practice time . . .and looked for much progress in a relatively short period of time." (p. 520)
4. Recitals, races, and other public events marked students' progress toward specific goals.
5. There was a great deal of independent learning during this stage as well as profitable discussion with teachers and other highly able students.
6. This was a time of practice, practice, practice and development of fundamental skills.
7. During this stage students became committed to the talent field and required less and less external motivation to achieve. When necessary, external motivation was provided by the teacher. Now more internally motivated, students accepted responsibility for furthering their progress.
8. "During the middle years, most of the students' closest friends and associates were also involved in the talent field, and these peers helped them view themselves in relation to it.

They were frequently aspiring to the same goals, and they became friends as well as competitors for these same goals.

9. During this stage students came to see themselves as "pianists," "swimmers," "mathematicians," and so on.

The Later Years

1. During this stage a master teacher was sought. Interestingly, only a small number of such teachers are available in any given field—about eight to ten. Consequently, competition for these positions was fierce, and students who were accepted by the teacher were expected to put "themselves in the hands of the teacher without reservation." (p. 525)
2. At this level, students were expected to do all that was humanly possible to achieve and excel, and they often attempted to break records or solve problems that had never before been solved.
3. Now that technical skill had been mastered, teachers of these students focused on the art of the discipline and helped students develop their personal style and performance.
4. "Their contacts with their fellow students were also important as a way of exchanging ideas and observing how others attack related problems...."
5. Students at this point scrutinized their own performances, were completely committed to their talent field, and often worked side by side with their master teacher.

To summarize, parents of the gifted participants in Bloom's study were quite different in many ways, but they were similar in that they were child-oriented and devoted to nurturing their children at all stages of development. They modeled hard work and the constructive use of one's time. Often, their own personal recreational activities, interests, or hobbies influenced their children. They encouraged curiosity among their children and patiently and carefully answered their questions.

In the Early Years stage, these children learned initial talent skills from parents, family, or friends of the family and generally viewed development of their talent as play. Their teachers were chosen out of convenience or proximity to the home. Too, they shared the ability to work extremely well with young people. To the children, learning was made much like a game and their teachers were very motivating and encouraging. They assisted the children by helping them progress quickly and grasp underlying ideas and processes. Practice routines at this stage were the responsibility of the parent.

In the Middle Years stage, the stage that most logically could coincide but in actuality might not necessarily coincide with the middle school years, these children outgrew their former teacher and searched for the best in the area. This teacher often required evidence of ability before accepting the student and required students to be serious, disciplined, and maintain a strong interest in the talent field. Students often competed for slots with these teachers, and the price for lessons usually increased dramatically. Perfection of fundamental skills was paramount and achieved with practice, practice, and more practice at this stage. Also, students were involved in recitals or public events marking their progress toward their goals. Students became more independent and were more highly involved in profitable interactions with their teachers and other highly able peers in their talent area. During this stage, they became more dedicated to their talent field and more internally motivated and ultimately accepted responsibility for furthering their own progress. Important, especially in light of questions concerning the grouping of gifted or talented individuals, is that participants in Bloom's study, as children, often chose as their closest friends others who were involved in the same talent pool. Additionally, these equally talented peers provided them with a standard within the field by which they could measure their own progress. Because they often aspired to the same goals, they and their talented peers became close friends as well as competitors. Participants also at this stage began to identify themselves according to their goals or as "pianists," "swimmers," "mathematicians," and so forth.

In the Later Years stage, a master teacher, one of a select few, was engaged, and development of the art of the discipline ensued. At this point students, without reservation, put themselves totally in the hands of the teacher. They excelled at the highest levels, broke records, and solved problems that had never before been solved. Many ultimately reached the pinnacle of their talent fields.

Whitehead's Three-Stage Theory of Learning and Talent Development

Easily recognized in Bloom's study is renewed interest and support of three specific stages of learning and talent development. Bloom's ideas may have been influenced by another scholar who preceded him. In 1929, Alfred North Whitehead also proposed a three-stage learning theory. The stages he described were romance, precision, and generalization. In describing the rhythm of education, he matter-of-factly stated that "the principle is merely this—that different subjects and modes of study should be undertaken by pupils at fitting times when they have reached the proper stage of mental development" (p. 28). By his definition, the stage of romance is "the stage of first apprehension.... The subject matter has the vividness of novelty. In this stage knowledge is not dominated by systematic procedure" (p. 28). In the following stage, the stage of precision, "width of relationship is subordinated to exactness of formulation. It is the stage of grammar, the grammar of language and the grammar of science" (p. 29). He later warned that a stage of precision is empty and fruitless unless it is preceded by a stage of romance. Whitehead defined the final stage of generalization as a stage of synthesis: "It is a return to romanticism with added advantage of classified idea and relevant technique. It is the fruition which has been the goal of the precise training" (p. 30). If these identifiable stages are indeed evident in the development of talent, as was implied in the findings of Bloom's study, how would they and other implications from this research impact grouping structures for the gifted and talented,

particularly in the middle school years? How would Bloom's "middle years" stage activities, goals, and instruction or Whitehead's "precision" stage processes apply?

The chronological ages associated with Whitehead's age of precision and Bloom's middle years correspond roughly with those of middle school students. The difficulty, however, is the unavoidable overlap on either end of the middle stages causing middle school students, depending on their speed of progression through these stages to, as a group, always contain members representing all of the stages no matter what the students' chronological ages might be. It could be quite likely then to have an eighth grader in the early or romantic stage in the development of a particular gift, while his sixth grade counterpart is in the final synthesis or generalization stage, totally committed to developing his specific talent. This, of course, could easily occur within a grade level as well. What would happen to the development of students having reached a stage of precision and increasing self-discipline and internal motivation if they were grouped with those still in the romantic, early stages or with those with no real interest or motivation to develop that particular talent at all? Multi-age grouping and self-selection grouping in middle school might allow children in similar stages of talent development to be grouped together.

Teachers described in Bloom's three stages appear to fulfill very different roles in the development of talented individuals. In the early years, the teacher's role is teaching the joy of a talent field, guiding discovery and productive play, and encouraging her pupils. In contrast, the teacher's role during the middle years is to teach commitment, responsibility, the work ethic, and technical skill. Teachers of students in this stage require them to attain carefully charted and increasingly challenging goals. Though the rigor continues and often increases in the later years, teachers in the final stage teach what can be taught only to extremely talented and totally committed students: understanding of the art and style of the talent field.

Interesting also are questions about the increasing benefits talented individuals found in interacting with specialized teachers and equally able peers. Having the appropriate teacher at the appropriate time or during the appropriate stage of development appeared to be very important. Likewise, both in the middle and later years, gifted people in Bloom's study emphasized the value of discussions with peers of like ability, interest, and dedication to their specific talent field. They often worked out problems together and supported one another through the rigors of practice and achieving of similar goals. This finding would support the homogeneous grouping of those at particular stages within specific talent fields.

Finally, a resounding theme in this research is an echo of Torrance's (1969) advice to those interested in developing creativity. "Don't spend your time trying to be well-rounded." If we begin to accept a differentiated view of giftedness and talent, there is an implicit assumption that some skills will not be as well-developed, and that some may even be laid aside as individuals develop their talent, their strength, the learning that they love. Perhaps we are not all meant to be "Renaissance" men or women. Instead, we may establish our strengths early in life and take greater interest in our schools because they help us find and develop our talents. As we seek out, learn and develop among those who share our dedication and our gift, we may ultimately recognize the pianist, poet, swimmer, mathematician, leader in us and contribute at high levels of performance to our society.

To What Extent is Philosophy Driving the Question?

The coincidence of school reform, the middle school movement, the cooperative learning movement, the inclusion movement, and the ability grouping/tracking controversy have brought grouping issues to the fore (Gallagher & Coleman, 1994). Almost everyone involved in educating children right now wants to better understand how grouping affects young people. Unfortunately, it seems that some stakeholders and proponents of various educational

philosophies are spending too much time defending positions in support of programs or movements rather than getting at precise questions about specific grouping effects and seeking definitive answers to those questions. In many instances, the grouping controversy has shaped the nature of questions asked about grouping (Bode, 1996). Certainly, past inquiries have contributed to our knowledge of grouping effects on school children. But, as Rogers (1998) reports, even in new studies, we seem to be asking many of the same questions. The time has come to gain alternative perspectives. The use of more inductive, bottom-up inquiry to investigate gifted students' perceptions of grouping effects would offer a valuable alternative viewpoint. Perhaps the children themselves will illuminate our conception of grouping issues and generate new questions.

Delving Deeper into the Grouping Controversy: Possible Philosophical Perspectives on Grouping

Requisite to gaining a broad understanding of grouping issues in schools is recognizing varied educational philosophies bearing upon them. The debate over grouping structures can take many forms. To illustrate, two of several possible lines of thought are outlined here. Also, questions representing alternative viewpoints to those presented are occasionally stated. One possible perspective is described by Stockard and Mayberry (1992) in their book on effective educational environments. In a well-presented review of research on the influences of student grouping on such educational outcomes as achievement, Stockard and Mayberry (1992) link desegregation effects, contextual effects (based on the relationship between a particular school's makeup and individual students' academic achievement and aspirations), and what some see as the need to eliminate ability grouping and tracking.

Though the desegregation era of the late 1960s and early 1970s prompted new thought on grouping in schools, it is interesting to note that schools in the 1990s were about as desegregated

as they were in 1972 (Stockard & Mayberry, 1992). According to Mahard and Crain (1983), desegregation, where it is occurring, whether in naturally integrated or bussed settings, does appear to have positive effects on minority students. In their review of research on minority achievement in desegregated schools, they reported that desegregation enhances minority achievement by roughly a third of a grade per year. They also stressed that positive achievement effects are most likely when minority children are placed in desegregated schools as early as possible, preferably in kindergarten. Finally, these authors also emphasized a point alluded to in the Coleman Report (1966), that minority children in desegregated schools should perceive that they have greater control over their own lives and future goals and thus be encouraged to behave in purposeful, achievement-related manners. A pertinent question here would be how has desegregation affected non-minority students?

In their discussion of contextual effects within schools, Stockard and Mayberry (1992) listed one of three areas of focus as the socioeconomic composition of schools. After commenting on the strong association between racial composition and socioeconomic composition of a school, they reported findings supported by several studies that students from schools with more higher-status classmates (generally white) have higher achievement, better school attendance, and higher aspirations:

> In other words, students from lower-status families or with lower ability levels tend to have better educational outcomes when they attend schools that include more students from a higher socioeconomic background than when they attend schools that are predominately attended by those from lower-status backgrounds (Alexander and Eckland, 1975; Alexander et al. 1979; Alwin and Otto, 1977; Bain and Anderson, 1974; Blau, 1960; Bowles and Gintis, 1976; Boyle, 1966; Coleman et al.,1966; Michael, 1961; Mortimore et al., 1988; Nelson, 1972; Sewell and Armer, 1966; Turner, 1964; Wilson,1959). (p.7)

No mention was made by Stockard and Mayberry as to how students from higher socioeconomic backgrounds were affected by greater inclusion of more students from lower socioeconomic groups.

In their review of research on ability grouping, Stockard and Mayberry (1992) began with a caveat:

> Much of the research in this area has not used the most sophisticated randomized experimental designs. Nor has it explored instructional techniques, interactions, and peer influences in ability groups in detail. Yet the findings across studies are fairly consistent. A large number of studies from a wide range of years suggest that, when students are in an environment with other high-achieving students, their own achievement tends to increase. In contrast, ability grouping appears to be detrimental for low-ability students. In other words, although ability grouping may sometimes benefit high-achieving students, a good deal of research indicates that it impedes the progress of students in lower groups (see Bridge et al. 1979, Kulik and Kulik, 1982, 1984; Esposito, 1973; Begle, 1975; Brophy and Good, 1986; Hallinan, 1987, 1990; Sorensen and Hallinan, 1986). (p.11)

In this statement, Stockard and Mayberry clearly outline the limitations of existing research before plunging forward with an analysis of that research. Most important are these limitations. Yet many schools across the country, especially middle schools, have been or are presently being restructured, often for the express purpose of eliminating ability grouping or tracking (Benbow, 1992), based on the often overgeneralized results of these studies (Demirsky Allan, 1991; Robinson, 1990; Rogers,1993). As part of this restructuring, gifted programs, particularly

homogeneously grouped programs, have been dismantled (Gallagher &Coleman, 1994), and gifted coordinators positions eliminated.

A second possible perspective on grouping was described by Lawrence Cremin (1989) in his book, Popular Education and Its Discontents. According to him, the overwhelming influx of students in American schools and colleges since World War II has caused great demands on our school systems from which we have not yet recovered:

> With respect to secondary and higher education, critics such as Irving Babbitt, Abraham Flexner, and Robert Hutchins leveled blast after blast against the relaxation of language requirements, the overcrowding of curricula with narrow technical courses, and the willingness to permit students to work out their own program of study. The spread of educational opportunity in the United States, they observed, reflected less a spirit of democratic fairness than a willingness to prolong adolescence. The result was an inferior educational product at every level.... (p. 4)

The problem Cremin poses, then, is that schooling must be available to everyone, yet the popularism of schooling, or creating a larger, more heterogeneous group of schoolchildren in a relatively short period of time, has resulted in lowered standards. What needs to be done, he said, is

> The system needs to be reconnected with the life of society. Young people need to have a greater range of opportunities to pursue their interests and to do so in real situations in association with working adults who are not kin. More mature people need to have a greater range of opportunities to pursue their vocational and avocational interests in a variety of institutions that are accessible, welcoming, and ready to tailor education to individual needs and backgrounds.... But there is a caveat. Certain historic functions of the universities having to do with the conduct of research, the transmission of high

> culture, and the creation and perpetuation of elites need to be preserved and protected from the demands of popularization in the public interest. Popularization is all well and good, but the training of leaders who partake of high culture and occupy key positions in the political, economic, and intellectual life of society remains all important. (p. 29)

Essentially, Cremin sees a place in society for "elites" and considers their training all-important. Because the term "elites" is so emotionally loaded, it is important to stress Cremin's definition of elites here. As he defines them, elites are leaders who partake of high culture and occupy key positions in the political, economic, and intellectual life of society. Elites are leaders—and leaders are responsible to those they lead. Cremin's definition carries more noble connotations than those sometimes associated with the term. In a utopian world these leaders or elites would be representative of the populace at large. In America, progress is evident, but we are not there yet. Only in recent decades has this society begun to more fully recognize and nurture the multifaceted talents existing among individuals within particular subcultures.

Cremin also stresses that all young people need to be reconnected with the life of society, or feel useful; and they should be able to pursue their interests and learn by doing in real situations. How many middle and high school students have little to no interest in "opportunities" in which they are involved in school? Offering students the opportunity to pursue interests by working in real situations with adults who are not kin sounds like a return to apprenticeships, or rather a modern form of them. In sum, according to Cremin, we must focus on providing and meeting the learning needs of all, no matter what their station or background, but at the same time we must, without apology, also meet the needs of the gifted and talented.

Sorting Through the Major Studies and Their Implications

A Few Words for the Consumer

Several scholars offer helpful hints for the research consumer interested in current grouping literature and its bearing, especially, on grouping for the gifted. These suggestions for methodology and terminology follow:

Methodology

> Remember that meta-analytic reviews and best-evidence syntheses are both studies of studies, and an important aspect of this technique of research review is that all studies ultimately used in the review are treated as equally valid. While clearly inadequate studies are omitted, "all other studies [are given] the same weight, without regard for their relative quality." (Demirsky Allen, 1991, p.60).
>
> Know that with best-evidence syntheses, criteria for inclusion in the review are more selective because the synthesizer first categorizes all studies by instructional variation and then culls out only the strongest studies per variation for inclusion in the analysis. <u>But</u>, a vulnerability of this approach is that the synthesizer is essentially judge and jury determining which studies are included or excluded from the synthesis. (Rogers, 1993, p. 9)
>
> Recall that the meta-evaluation is an attempt to bring together "all general research studies conducted on a practice and to average across all these studies to calculate a Mean Effect Size. The Effect Size is first calculated for each study separately, using the formula ES = *M*e-*M*c/sc, where *M* represents the mean scores of the experimental (e) and control (c) groups and s represents the standard deviation of the control group. These individual Effect Sizes are then averaged across all the studies." (Rogers, 1993, p. 9) An

> Effect size of +.30, that which is accepted by the research community as being practically significant, indicates that the experimental group involved in the new practice under study "performed at approximately three school months further along the standardized test's grade equivalent scale than the control group, or , in effect, the experimental students could potentially be taught in three years what the control students would accomplish in four (Glass, McGaw, & Smith, 1981). (Rogers, 1993, p. 9)

> Recognize that a historical methodological problem for researchers relying on standardized test scores as part of the data set is the ceiling effect. Gifted students, (the top 3-7 percent), and even high-ability students (the top 33 percent) though to a lesser degree, often approach the ceiling on standardized achievement tests, and therefore make it difficult to demonstrate significant academic improvement. (Demirsky Allen, 1991, p. 60)

Terminology

> Realize that "grouping" is not a single thing; consequently, educators should recognize its various forms and purposes and distinguish among program types:

> > "Type I: simple programs in which all ability groups are taught with the same or similar materials and by the same or similar methods." (Kulik, 1991, p. 67) Also called XYZ grouping, after a Detroit program which began in 1919, in this type "schools rank students by IQ test or some other omnibus test of ability, group the students into separate classes (in Detroit, labeled X,Y, and Z) and teach an identical curriculum to students' ability" (Loveless, 1998, Achievement section, ¶ 3)

> Type II: programs in which teaching materials and methods are adjusted to meet the special needs of a specific aptitude group (for example, enriched instruction for the gifted and talented). (Kulik, 1991, p. 67)

> Type III: programs in which adjustment of teaching materials is so extensive that it affects a student's rate of progress through school (for example, programs of accelerated instruction). (Kulik, 1991, p. 67)

Consider that different people using the terms "ability grouping" and "tracking" can mean different things, and currently some use them interchangeably. Loveless (1998) harkens back to original definitions of the terms from thirty years ago and draws the distinction between ability grouping and tracking by defining them thusly: ability grouping, he says, is typically used in elementary schools for reading instruction. Students, such as the "bluebirds" or "redbirds," are organized within their class for instruction targeted to the ability level of the group. Tracking, on the other hand, is generally used in middle or high schools to group students between classes so as to offer academic courses that reflect differences in students' prior learning. Outstanding readers, then, might take Honors English, while their struggling classmates might take a remedial reading course. It is important when reading research to establish exactly how these terms are used in each individual study.

Major Studies

Discussion in this section is, by design, restricted to key individuals and studies in the grouping literature in an effort to assimilate and coalesce findings and ideas discussed previously. In just about any review of research on grouping, ability grouping, or tracking, the research of

two prominent scholars, Robert Slavin, a critic of tracking, and James G. Kulik, a defender of ability grouping and some forms of tracking, are cited. Also, the names of researchers Jeannie Oakes, a de-tracking proponent, and Karen Rogers, a supporter of gifted education, often come up as well.

Two of Slavin's major meta-evaluations of grouping practices (1987, 1990) have been noted extensively. The first (1987) was a study of effects of forms of ability grouping in the elementary school. Studies of self-contained grouped classes, classes regrouped for reading and math, classes grouped across grades by ability, and classes with within-class groups were included in this best evidence synthesis. The second (1990) was a study of the effects of ability grouping using data from 27 middle schools meeting Slavin's criteria for inclusion in the study. Slavin found in both studies that effects on achievement of full-time tracking versus nontracking in the elementary grades were essentially zero. He also concluded that, in elementary schools, regrouping for specific subject instruction—without documentation of differentiation—resulted in no measurable gains. Yet from the same data sets, Slavin (1987, 1990) also recorded a moderate achievement effect for within-class grouping by achievement or ability (.34), and even greater gains (.45) for cross-grade grouping in the elementary grades.

In a meta-analysis of 51 studies of the effectiveness of grouping in secondary schools, Kulik and Kulik (1982) found that, in the typical study, benefits from grouping for all groups were small but significant on achievement measures—students realized an average increase of one-tenth standard deviation on examination scores. When comparing 33 studies of XYZ groupings, he calculated effect sizes so small they were considered not significantly different from zero. Later, Kulik (1992a) commented on why effects in XYZ groups were so small, stating that the chief reason was likely curricular uniformity. In other words, it was probable that because students received different placements but did not receive different treatments, effects were small. When analyzing which studies in the 1982 meta-analysis consistently reported more

positive ability grouping effects on student achievement, Kulik found that "effects were largest in the 14 studies of programs designed for talented and gifted students" (p. 422).

Generalizations and Implications

In 1998 the Thomas B. Fordham Foundation, considered by many to be a politically conservative organization, published a report on the tracking and ability grouping debate to "help serious education reformers sort through the muddle of evidence and pseudo-evidence in such debates and to equip them with the clearest and most trustworthy information" (Loveless, 1998, Foreword, ¶ 4). The author of the report was Tom Loveless who, at that time, was a faculty member of Harvard's John F. Kennedy School of Government. Although his comments on tracking reform were recently published in *Educational Leadership* (1999), some of his work such as this report on the tracking and ability-grouping debate was not subjected to the same level of peer review as that published in scholarly journals. In 1990-1997, Loveless conducted three extensive surveys of tracking practices, visited 29 schools, and interviewed some 250 teachers and principals. In the foreword, Chester Finn, president of the foundation, said that this report revealed "a more complicated and honest story than we have heard before on this topic" (Loveless, Foreword ¶ 5). In several of the following paragraphs, I rely heavily on Loveless's review and interpretation of this research for one reason: his is simply the most lucid and even-handed current report of ability grouping and tracking that I have found; his is also an uncommonly well-written general overview minus the confusing dross that collects in a mass of studies numbering more than seven hundred.

After noting the prodigious amount of tracking and ability grouping research included in the meta-evaluations of Slavin and Kulik, Loveless (1998) organized conclusions according to points of agreement and divergence. They agreed, he said, that results of studies of within-class ability grouping are positive; they also agreed that cross-grade ability grouping (similar to the

Joplin Plan, a cross-grade reading program) boosts achievement. Remarked Loveless (1998) "In short, Slavin and Kulik validate the most widely used forms of ability grouping at the elementary level. Ability grouping promotes achievement, and no particular group of children—high, middle, or low ability—misses out on the gain" (section: Achievement, ¶ 2).

They did not agree, stressed Loveless (1998), on the implications of results for between-class grouping or tracking. While both acknowledged that XYZ grouping plans (assigning students to tracks based on IQ or ability tests and then teaching them identical curricula) have no significant effect on learning, Slavin from there concluded that tracking had no effect on achievement. Conversely, Kulik, from the same logical juncture, asserted that the XYZ grouping method is passé, that educators now use achievement tests in specific disciplines instead of IQ or other omnibus tests for track placement, and that students are now assigned to tracks for the express purpose of adapting curricula to ability levels. And the fact that curricula are now adapted to the ability of the students in the track is key, for the research concerning effects of tailoring course content to ability levels is impressive. Loveless (1998) summarized it like this:

> Academic enrichment programs produce significant gains. Accelerated programs, where students tackle the curriculum of later grades, produce the largest gains of all. Accelerated gifted students dramatically outperform similar students in non-accelerated classes. Slavin omits studies of these programs from his analysis. (section: Achievement section, ¶ 5)

Slavin explained that his reason for omitting the studies of gifted programs from his analysis was selection bias. He posited that when two students with similar test achievement scores are selected or not selected for participation in a gifted program, they may differ on other characteristics important to learning such as attendance, behavior, motivation or study habits. Then, when the student accepted to the gifted program shows gains and the rejected student gets

only mediocre scores in the regular class, the difference in their scores could be attributed to good screening on characteristics supportive of learning rather than to differences in the quality of the programs (Loveless, 1998).

Although the points of agreement and divergence that Loveless (1998) elucidates above are interesting, even more intriguing are the three things he considers striking about the Slavin-Kulik debate. The first is the fact that the scholars' "disagreement hinges on whether tracking is neutral or beneficial. Neither researcher claims to have evidence that tracking harms achievement, of students generally or of students in any single track" (Loveless, section: Achievement, ¶ 6). The second is that Slavin's decision to reject from his meta-evaluation the studies of enriched and accelerated programs for the gifted, and Kulik's willingness to include in his meta-evaluation the studies of enriched and accelerated programs for the gifted is pivotal. Without those studies, Slavin's results lead him to conclude that tracking is a non-factor. With them, Kulik's results lead him to conclude that tracking promotes achievement. Third, Loveless asserts that although Slavin and Kulik agree on some points concerning ability grouping and tracking, they are still philosophically at odds. Slavin (and Oakes, 1985) opposes tracking, considers it inegalitarian and anti-democratic, generally sees no significant positive gains when it is used, and thinks it should be abandoned. Kulik promotes the types of tracking that have been demonstrated to be effective and reasons that because tracking benefits high achievers and harms no one, abandoning it would be a mistake. Finally, one last salient point made by Loveless concerning these meta-evaluations is that almost all of the studies included in Slavin and Kulik's analyses were conducted before 1975 (Loveless, 1998). Much has changed since then.

The Prevalence of Grouping in Modern Times

Especially germane to this discussion of grouping and gifted middle schoolers' perceptions are Loveless's (1998) findings about the prevalence of tracking and, particularly,

current tracking practices in the middle school. Although according to Loveless (1998) no national surveys of ability grouping in elementary school have been conducted, from local studies a consistent picture emerges indicating that "ability grouping for reading instruction appears nearly universal, especially in the early grades;" however, "tracking between classes remains rare at the elementary level." (Loveless, 1998, Section One: The Prevalence…, ¶ 1)

In a table representing the percentage of schools that track, Loveless (1998) showed that in 1988 roughly 20% of schools surveyed tracked all subjects in grades 5-8, between 40-50% tracked for some subjects, and between 27-37% did not track. Also, tracking in English often does not begin until seventh or eighth grade, and tracking in math typically begins around sixth or seventh grade, when advanced learners take pre-algebra. In another table representing eighth grade math enrollment in 1996, Loveless (1998) illustrated that by eighth grade, about one quarter of all students take algebra. The rest either take pre-algebra, eighth grade math, or "other." The largely ill-defined curriculum of eighth grade math varies widely according to the locally adopted textbook, and if remedial classes exist, their curriculum often centers on basic arithmetic.

In general, Loveless (1998) reported that middle school students are typically grouped in some subjects, but not all, with distinct levels of curriculum usually found in English and mathematics. Students are, he said, more frequently heterogeneously grouped in social studies and science. Class assignments to English and math levels are based on such criteria as previous grades, teachers' recommendations, or staff-designed placement tests. Of interest, too, is his comment that if parents insist on a particular placement, they are likely to get their way (Useem, 1992).

At the high school level, Loveless (1998) noted two important distinctions between tracking of yore and modern tracking. First, tracking systems in high secondary grades are now more complex and therefore flexible, and are often part of a mixed system including both tracked

and heterogeneous classes. The result is that, as Loveless described it, "it is more accurate to think of today's tracks as multiple pathways through different disciplines than as a single road winding through the full high school curriculum (section: Tracking in High Schools, ¶ 1). Second, another major change is that high tracks have now become more accessible because placement criteria such as completion of prerequisite courses, teacher recommendations, and course grades have superceded the sole use of standardized test scores. Now in more than 80% of schools, students are allowed to choose their course level if prerequisites have been fulfilled. Additionally, in many schools parents may sign waivers to enroll their children in courses against the recommendation of teachers or counselors. Says Loveless, "a degree of self-tracking exists today that was unheard of decades ago" (section: Tracking in High Schools, ¶ 3).

Implications of Grouping Research for the Gifted

Since their study in 1982, James and Chen-Lin Kulik have continued to find that like-ability grouping is appropriate for meeting the needs of the gifted, and their conclusions have been supported by those of Karen Rogers (1991) as well. In addition to the 1982 study, other research syntheses conducted by the Kuliks (1982,1984, 1991, 1992) all indicate marked achievement gains across all subject areas for gifted children grouped homogenously and provided instruction tailored to their needs. In their 1991 meta-analysis of 25 studies of gifted children placed in separate classes, 19 of the studies showed the gifted achieved more when grouped in like-ability classes: about 63% of those grouped homogenously outperformed those who were grouped heterogeneously. These positive effects of ability grouping for the gifted were maintained in a follow-up study where Kulik and Kulik (1992) also found that ability grouping does not harm students in lower groups. This finding was qualified with the statement that "For all types of students…the size of the academic gains is a function of the program type" (p.76).

Said Kulik in 1998, “American education would be harmed by the wholesale elimination of programs that group learners for instruction by ability” (p. 3).

Another proponent of ability grouping for the gifted is Karen Rogers. In an effort to demystify grouping research for administrators hoping to make more informed decisions about grouping, she (1998) reviewed 26 single grouping studies and two meta-analytic reviews that had been done since she conducted a meta-evaluation of 13 ability grouping meta-analyses in 1991. After providing a table summarizing grouping practices research published prior to 1992 and the accompanying calculated effect sizes for different grouping strategies, she listed nine conclusions drawn from analyses of the current research, 1992-1998. They are

1. Advanced students benefit more academically than low-ability students from grouping of similar students.
2. Homogeneous groups are more beneficial academically for all abilities than heterogeneous grouping.
3. Continuous progress alone makes no academic difference, but when combined with a variety of instructional approaches, it does.
4. Small group learning is academically more beneficial than whole group learning.
5. What is done when students are grouped is directly related to achievement rather than actual placement in a group (i.e., instructional quality, instructional time, and class size.
6. Low-ability students benefit academically when paired with a high-ability partner, but the same may not hold true for the high-ability partner.
7. Both high-ability and low-ability students benefit from more social interactions when grouped within class with like-ability peers.
8. There is less acting out and more direct participation in discussion from low-ability students when they are grouped with like-ability peers.

9. Low-ability students tend to acquire more self-confidence about their abilities when in mixed-ability groups.

In addition to citations of studies supporting the conclusions listed above, Rogers also noted exceptions. Rogers summarized the research on grouping and nine conclusions listed in her review by stating that

> high ability and gifted students tend to benefit most from like-ability grouping, because the strategy provides them with the opportunity to access more advanced knowledge and skills and to practice deeper processing. Most likely, this access can be provided when instructors are not forced to divide their teaching energies and efforts among widely diverse levels of ability and achievement. (p. 44)

Clearly, homogeneous grouping options must be made available to gifted students. In light of Bloom's stages of talent development or Whitehead's three-stage theory of learning and talent development, all students gifted or talented in a particular area or discipline, who have moved beyond the initial stages of talent development to the Middle Years Stage or Stage of Precision, require consistent access to others of like ability in an enriched and/or accelerated setting where curricula and pace are adapted to their level—in order to continue normally in the development process. Results from research described previously document the necessity for and effectiveness of this grouping strategy for able learners and anyone in the middle stages of talent development.

CHAPTER 5

GROUPING OPTIONS FOR GIFTED MIDDLE SCHOOLERS

Following is a brief description of several different means of grouping gifted children. Also mentioned are relative benefits and concerns one might consider before choosing to implement a particular option. It is assumed, prior to discussing these options, that whoever is comparing them will have already established a specific purpose for grouping the gifted and talented, such as for acceleration, for enrichment, or for some other described purpose, and that they have clearly formulated who the "gifted" or "talented" are. The exact purpose for grouping as well as specific identification of the group to be served must be established before comparing grouping options.

Magnet Schools: Schools Designed For Gifted Children

Description**:** Magnet schools, or schools designed to nurture specific talents in highly able children, originally were most often found in larger cities. Many of the early magnet schools are still in existence. Some, like magnet schools in the arts, specialize in serving students with talent in dance, theater, music, writing, and visual arts. Students usually audition, interview, or submit products as part of the application process, which can be highly competitive. Staff members in these schools are often professional performers (Van Tassel-Baska, 1988).

Other types of magnet schools are available in some areas as well. Examples of these include the North Carolina School of Math and Science, the Bronx High School of Science in New York City, and the Louisiana School for Math, Science and the Arts. Additionally, some school systems have developed magnet school programs to meet the needs of the gifted while accomplishing another goal: encouraging desegregation and greater participation of poor and

minority children in magnet school programs. This is done by placing the magnet school in low-income neighborhoods and allowing children and their parents to choose to attend the school accentuating the child's particular strengths. In some cities, each high school has a magnet school-within-the-school specializing in one particular field such as science, math, language arts, or fine arts (Kitano & Kirby, 1986).

Considerations**:** In a study of the New Orleans Center for the Creative Arts (NOCCA), Kauffman, Tews, and Milam (1986) found that students at this magnet school enjoyed the qualitative differences in their liberal arts training. The researchers also reported that development of students' self-esteem and future goals were among the most significant outcomes of their arts training program. However, some students attending NOCCA also expressed feelings of isolation.

Tracking—Complete Homogeneous Grouping of All Children

Description: Children attending completely tracked schools are placed in classes with children of similar ability, at least for their academic subjects. Music, band, shop, art, physical education, and other such classes have traditionally been heterogeneously grouped.

Considerations: As is suggested by the research reviewed by Stockard and Mayberry (1992), complete tracking, as it has been done in the past, proved less effective than other grouping methods for low ability or "at-risk" students. Hallinan (1987) suggested that further research be done comparing optimally created homogeneously grouped situations with optimally created heterogeneously grouped situations for low achieving children. On the other hand, Kulik and Kulik found, in four research syntheses (1982, 1984, 1985, 1990), that gifted students who were grouped homogeneously in full-time gifted programs showed marked achievement gains across all subject areas. There was also a moderate increase in attitude toward the subjects in which these students were grouped. Additionally, some scholars have also questioned whether full-time homogeneous grouping inhibits "normal" social interaction and encourages elitism (Oakes, 1985;

Slavin, 1987). Feldhusen and Moon (1992) claim that "homogenization attempts to create justice by equal treatment of unequals," and they go on to conclude that "this approach is inherently unjust to the most and least able" (p. 3).

Nontracking—Complete Heterogeneous Grouping of All Children

Description: Children in non-tracked schools are placed in classrooms with other children of differing abilities. Efforts are made in some schools to be certain that ability levels are evenly dispersed within a particular classroom; in others, students are distributed among the classes in their grade level randomly. The higher the grade in school, K-8, the greater the likelihood of a broader range of ability levels. In an eighth grade middle school setting, for instance, where the range of abilities would be broadest, it would be possible for a child reading on a first grade level to be in class with a child reading on the college level.

Considerations: Smith-Maddox and Wheelock (1995) list three reasons for untracking:

> First, untracking schools seek ways to reduce the isolation of student groups from one another. . . . Second, untracking schools seek to expand access to valued knowledge to all students . . . . Third, untracking schools extend high expectations to all students by showing them how to succeed and by providing them with the necessary information and support structures to do so. (p. 223)

One could question whether reducing isolation, expanding access to valued knowledge to all students, and extending high expectations to all students and providing them with support can only be achieved if students are detracked. Detracking is possibly one way this could be done, but could there not be others?

Several researchers recommend heterogeneous grouping accompanied by cooperative learning techniques as a means of meeting the needs of all students while avoiding elitism (Johnson & Johnson, 1986; Sharon, 1980, Slavin, 1980). In 1990, however, Robinson completed

an exhaustive search of the literature to find any solid studies supporting achievement gains for gifted children when grouped heterogeneously in cooperative learning situations. She found none. Moreover, several researchers have questioned the generalization of results from other studies to questions about the gifted (Demirsky-Allen, 1991; Robinson, 1990; Rogers, 1993). Most of these take issue with meta-analytic reviews that treat all studies in the analysis as equally valid regardless of their relative quality (Demirsky Allen, 1991). Also questioned are studies such as Slavin's (1986) that excluded from the analyses all studies focusing on the gifted (Demirsky-Allen, 1991; Rogers, 1993). And finally, the confounding of measurement of achievement among the gifted due to the "ceiling effect" in testing was also stated (Demirsky-Allen, 1991; Robinson, 1990). When students correctly answer all or almost all questions on a test, the test or instrument used may fail to indicate their true achievement or ability or what could be measured by a more challenging test. Likewise, it is difficult to show gains when students get all or nearly all answers correct on the initial measure.

Homogeneously Grouping the Gifted and Talented for Some Classes While Heterogeneously Grouping Them for Others

Description: This form of grouping is most common in middle school (Loveless, 1998). Middle school children take a combination of academic and exploratory courses during an average school week. The most common academic courses are mathematics, language arts, science, and social studies. In many cases, students are homogeneously grouped for math and language arts and heterogeneously grouped for science and social studies. All other classes are considered exploratory or elective classes. Typical exploratory classes are music, art, personal health, home economics, technology, chorus, and band. A school providing exploratories for gifted students might also include such courses as Odyssey of the Mind groups, Great Books discussion groups, or Academic Hallmarks. Additional exploratory possibilities offered to all students might include a drama club, a literary magazine or newspaper class, or classes formulated according to teachers'

expertise, hobbies, or interests such as chess club, computer programming, or gardening. If students are offered choices of classes from the exploratory offerings, they could also be termed elective courses. Although the core academic courses are required, students may elect to be in a homogeneously grouped (often accelerated or enriched) class, or they may elect to remain in a heterogeneously grouped class following the standard curriculum.

Considerations: The latitude of offerings and choices provided with this type of grouping arrangement is a plus. If such a grouping system is well-developed, all children in a school may pursue interests and maximize certain strengths. Gifted children would especially appreciate courses specifically designed to meet their needs, and, if courses actually were elected by students, would have greater control in pursuing their true interests, gifts, or talents. The same would hold true for other students. The highly motivated, for instance, would be able to elect to participate in higher level courses in areas of their choosing, and any student could choose a learning focus. Additionally, by self-selecting into a course, students should be grouped with others of similar interest and, in some cases, ability. According to Bloom (1985), interaction with peers of like interest and ability during the middle years is of utmost importance in the development of the gifted and talented. Also, in contrast to some of the research discussed by Stockard and Mayberry (1992), it appears that the presence of gifted children in a regular classroom is not required for other classmates to be successful. In a comparison of achievement, student attitudes, and perceptions in homogeneous and heterogeneous classrooms, Shields (1995) found that removing gifted and talented children from the heterogeneous classroom to serve them in a homogeneous setting had no detrimental effects on other students served in the heterogeneous classroom. Finally, a concern arises for gifted and talented students when all academic courses are heterogeneously grouped and only some exploratory classes are homogeneously grouped. In this situation course work in elective courses may be more differentiated for the gifted and rigorous than core academic courses, resulting in a weaker

foundation of knowledge and skills upon which the differentiated curriculum is built. This can be frustrating to students and teachers alike.

Cluster Grouping the Gifted and Talented Within Otherwise Heterogeneously Grouped Classes

Description: Cluster grouping is the intentional placement of a group of gifted or talented students in an otherwise heterogeneous classroom with a teacher who is trained and willing to provide challenging learning experiences for these children (McInerney, 1983).

Considerations: Cluster grouping is another option which allows gifted students interaction and shared learning with both gifted and nongifted peers. It has become especially popular in school systems that have adopted heterogeneous grouping policies or have eliminated special programs for the gifted and talented (Purcell, 1994). A possible concern with cluster grouping for those adamant about the maintenance of heterogeneous grouping structures is that gifted students are pulled from other classrooms in the grade level to be placed in the cluster class. Also, some may argue that the best teachers are those teaching the gifted cluster (Hoover, Sayler, & Feldhusen, 1993).

Grouping of the Gifted and Talented Through Self-Selection

Description: Grouping of the gifted through self-selection may be done within a particular class in which students are offered a list of topics or real problems to investigate. Gifted children could also self-select to be in enrichment or accelerated program options either in academic or non-academic courses similar to those described in the option where they are homogenously grouped for some classes and heterogeneously grouped for others. The point of self-selection is that students are given a choice of classes in which they may enroll.

Considerations: Renzulli, in developing his Enrichment Triad Model and three-ring conception of giftedness, considered motivation or "task commitment" as one of three required traits and an outcome of those participating in gifted and talented programs. The other two required traits are

(1) above-average general ability, and (2) creativity. Certainly, a self-selected grouping option accommodates those who are motivated or committed to learn more about a particular subject offered. A concern would be for those children who may not be aware of their abilities or aware of a particular area of study.

Enrichment Clusters for Gifted Learning

Description: Enrichment clusters have now been developed by Renzulli (1999) and Reis (1998) as a total school option. This option pairs self-selection with authentic learning, or learning applied to real life problems, and allows students to choose to participate in ungraded groups dedicated emotionally and intellectually to addressing an unsolved problem that is truly meaningful to them—the members of the group. The group then works in a relatively unstructured learning environment to develop solutions resulting in authentic products or services designed for a specified audience. The teacher's role is that of coach, and as facilitator the teacher "must allow students to experience frustration and struggle to turn setbacks into successes" (Renzulli, 1999, p. 22). Enrichment clusters generally meet for one half day per week.

Considerations: The obvious benefit of this option is that it incorporates a broader view of giftedness and talent, exploits students' interests and personal motivation, and encourages self-directed learning, cooperation, planning, resourcefulness, time-management, and problem finding and solving—for all children school-wide who are interested and motivated to participate. The greatest challenge with such a program is determining what to do with the children who, no matter what, are not interested in anything and do not want to participate in any cluster. However, the earlier children can be involved and understand the latitude of such an option, the more their natural curiosity may be piqued and the less they may fall into this regrettable category. Another possible liability with this option is that a larger number of faculty members must participate and therefore be trained to implement this option effectively.

Pull-Out Programs for the Gifted and Talented

Description: Pull-out programs have historically been more prevalent in elementary school settings than in middle school settings. They are, however, operating in some middle schools in some areas. Children in pull-out programs are released from regular classes to participate in some form of enrichment or acceleration, with this often taking place in a special education classroom. Generally, pull-out groups are homogeneous in terms of ability or achievement. Considerations: Benefits of these situations are that students are able to spend time with and learn among their intellectual peers for at least some period during the school week. Ostensibly, curriculum in these classes is designed expressly for the gifted child. Sometimes, when the special education teacher has little training in working with gifted children, this may not be so. Obvious difficulties arise with pull-out programs for the gifted because the special education teacher, the regular teacher, and the gifted child may be unable to agree on what to do about classwork and learning missed when the child is pulled out. Negotiations among students and teachers on missed work are always a part of the pull-out option. Furthermore, gifted children do not always want to be pulled out, particularly if assignments in either the regular classroom or pull-out program are not differentiated or compacted to accommodate their needs. Finally, young children, especially, may have difficulty dealing with reactions of nongifted peers to their being in a gifted program. No one likes to be called a nerd.

Comparisons and Questions

All grouping options outlined here have merit. To try to compare them without a set of parameters by which they might be chosen for a particular body of students, a particular site, a particular philosophy, seems pointless. Grouping options are available to assist educators in making the best match among the needs of children, what can realistically be accomplished, and what we know will work best. There is so much controversy about which grouping situations do work well for specific kinds of learners that it is time to back up. Before making sweeping

changes in the name of school reform, educators need to gather more and different information about grouping options and how they affect particular school populations. We need to study gifted children closely, in each type of grouping structure to answer more of the "how" questions. In a homogeneously grouped class, how do gifted children interact with one another? How do the same children interact in a heterogeneously grouped situation? This question could be translated to a cluster grouping class, a pull-out program, a magnet school. By carefully observing gifted children in particular grouping structures, and approaching questions of achievement, motivation, self-esteem, and peer interaction from an inductive stance, avenues of addressing some of the "how" questions may be discovered.

CHAPTER 6

WHAT THE GIFTED CHILDREN SAY

Gifted Students' Perceptions of Grouping and How It Relates to Their Own Motivation, Achievement, Peer Interaction, and Self-Esteem

Data selected for analysis in this document were generated by the gifted student cohort and produced mainly in the form of questionnaire responses on *Questionnaires A and B*. I wrote the questions for the questionnaires after observing and talking informally with participants in this study for several weeks in late March and early April, 1990. Questionnaire items were also informed by a prior pilot study that I had conducted with four gifted students attending the same school the year before. From this pilot study, several of the guiding research questions for the present study were generated, including the one listed below.

After gaining a better understanding of the Laurel Falls community, school system, school, and people in it generally (discussed in Chapter 3), I then focused on 41 identified gifted children who had been placed on two of the four eighth grade teams at Laurel Falls Middle School. These children, 21 boys and 20 girls, all White with the exception of three who were of Middle Eastern descent, had as a group been involved in gifted programming for several years, with about 70% receiving services since the fourth grade. In the middle grades, sixth through eighth, over 80% had been in gifted programs since they came to the middle school. Although roughly 10% of the student population in the school system was Black, none of the children in the eighth grade gifted cohort in 1990 were Black. All responded to questions on four separate questionnaires over the course of roughly an eight-week period, and four were interviewed.

From initial *Questionnaire A* data, demographics were determined, and the history of each child's participation in gifted services over the course of his or her school career was traced

to produce some of the information described previously. Then, after answering on *Questionnaire A* these questions about schools attended in grades K-8, experiences in gifted programs in grades K-8, and grouping procedures used in grades K-8, students were asked to respond to questions on *Questionnaire B.* Six of the twelve items on *Questionnaire B* were in-depth questions designed to elicit the gifted cohort's perceptions of their motivation, achievement, peer interaction and self-esteem in homogeneously versus heterogeneously grouped classes. These six questions grew from one of the original research questions guiding this study and my observations of and interactions with participants at the research site. The initial guiding question was:

What do young gifted preteens or adolescents see as benefits and liabilities, if any, of each grouping situation (homogeneous or heterogeneous)?

While considering this question in light of the over-arching research goal of describing how homogeneous versus heterogeneous grouping structures affect gifted students' perception of their achievement, motivation, self-esteem, and peer-interaction, I constructed these questions. In these first six items on *Questionnaire B,* students were prompted to think about the appeal or lack thereof of homogeneously grouped classes collectively or heterogeneously grouped classes collectively. These responses were then analyzed for discussion in this document. Discussion related to individual classes, whether homogeneously or heterogeneously grouped, will be discussed in future analyses and reports.

Knowing Each Other's Strengths and Weaknesses

The first two items on *Questionnaire B* were related to terminology. I asked them because I was curious to see if gifted eighth grade students could, given a basic definition of the terms *homogeneous* and *heterogeneous* and an explanation of how the terms are often used to describe class groupings of like and mixed ability students respectively, then correctly identify which of the two terms most accurately described class groupings for each of their classes listed

on their individual schedules for the year. Each student was scheduled for five academic classes and six exploratory classes for the year.

The result was, without being told by me or any other school personnel the procedures for grouping classes, all 41 gifted students correctly identified whether each of their classes was homogeneously or heterogeneously grouped, with 100% accuracy. At the time, their academic classes in algebra, language arts, reading, science, and social studies were grouped by ability, while exploratories (art, band, chorus, foreign language, health, home economics, music, orchestra, physical education) were essentially heterogeneously grouped. That all of the children easily identified the grouping status of their classes indicated that they both understood the terms and were able to apply them correctly when describing the way they and fellow classmates were congregated in each of their classes. Apparently, gifted eighth graders, or at least the ones in this study, can indeed identify homogeneous and heterogeneous grouping structures.

Moreover, they were able to further refine the terms and concept of grouping structures, for those who were in a special advanced chorus noted this in their responses explaining that they were homogeneously grouped in that class according to vocal talent. Students in the regular choral groups made no such distinction. Clearly, these twelve- and thirteen-year-olds had a sense of who was working at a comparable level and who was not—without being told who was and who was not. An interesting tandem question to ask is do they also know who are the best soccer players, which kids can paint and draw, which kids can build a computer, which kids would make the best class officers, which kids can make music, and such? My guess is they do. Unlike elementary schoolchildren who appear to be less able to discern the skill levels and talents of their peers, these eighth graders had no trouble doing so.

According to Wiles and Bondi (1986) and Fenwick (1987), a characteristic of the middle school child is the tendency toward both self-consciousness and brutal honesty. It seems important, then, for educators working with these young adolescents to be aware of this characteristic of the age group and capitalize on it. If older middle school children have

developed an awareness of the talents and areas for improvement in their peers, and are more open about their own and others' strengths and weaknesses, should not effective approaches for addressing different ability levels and accompanying educational needs among older middle school children be fundamentally different from those used to address different ability levels among elementary school children? While younger children are just beginning to learn to value, accept, and appreciate others in their class and their talents, and consequently require a more heterogeneous mix of classmates in order to do that, their older middle level brothers and sisters seem to be at a later stage in the process. With their heightened awareness of self and others combined with increasingly differentiated abilities as they develop, older middle school children, whether grouped to diminish ability differences or not, will naturally assess how their own abilities and skills stack up against those of their peers—and talk about it. Not only are young adolescents beginning to clearly recognize the strengths and weaknesses of others, they are simultaneously assessing their own strengths and weaknesses while also beginning an additional process of defining themselves and verifying their own place among their peers (Wiles & Bondi, 1985). The most appropriate grouping structures for older middle school children, then, may be quite different from those for elementary school children.

If adults influencing and, through their leadership, building the social context for a school repeatedly emphasized the importance of all types of intelligence and talent (Gardner, 1983), students could learn by example to value the good, the skill, the talent honestly recognizable in each individual peer—whether it be academic, artistic, kinesthetic, social-emotional, and so on—and thereby attain higher levels of awareness, understanding, and appreciation for their schoolmates, even those unlike them. Such openness about every student's abilities or talents might also create a more nurturing environment for individual students as they negotiate their own path of self-identity and self-discovery. Truth about others, truth about self is a first step in appreciation of others and appreciation of self. For young teen and preteens beginning their quest for self-discovery, unblinking honesty and "knowing where they stand" may be a requirement

enabling them to proceed through this process and grow. Rather than promulgate heterogeneous grouping as the only way to avoid stigmatizing students weak in particular academic areas (their friends or classmates probably already know anyway), perhaps educators should seek broader (impacting the whole social context of the school) yet more straightforward ways to acknowledge the strengths academically weak students do have while simultaneously providing focused, nurturing, self-esteem building programs tailored to their needs and designed to ensure appropriate academic progress and success.

The Appeal or Lack Thereof of Homogeneously or Heterogeneously Grouped Classes: Four Polarized Questions

The next four items on *Questionnaire B* were created as a set and designed to prompt the children to think about reasons that homogeneous and heterogeneously grouped classes might or might not appeal to them. The use of polarized questions was purposeful and first based on what I knew from experience as a teacher: in order to get middle school students to both state their observations or opinions and analyze them beyond a one or two-word answer, they needed structure to generate their own analysis. Consequently, I provided a frame prompting them to consider what appealed to them and what did not when thinking about homogeneous and heterogeneously grouped classes. Later, I recognized that my design for these questions was consistent with and supported by Elkind's (recorded in Wiles & Bondi, 1986) description of the developmental stages and thinking processes of middle schoolers. The majority of children during middle school move through two distinct developmental stages described by Piaget as concrete operations and formal operations stages. By eighth grade, most are closer to the formal operations stage, the stage that allows them to hold several variables in mind simultaneously, but "in the young adolescent, these newly attained formal operations often are not under full control" (Wiles & Bondi, 1986, p. 22). Polarized questions, therefore, prompted the children in this study to think about pros and cons, like's and dislike's, benefits and liabilities of grouping situations

individually to gain a more thorough understanding of their perceptions. It was interesting to see how well, using this frame, the children analyzed their own observations and opinions and said what they thought. The questions were:

B-3 *Give as many reasons as you can telling why homogeneously grouped classes appeal to you.*
B-4 *Give as many reasons as you can telling why heterogeneously grouped classes appeal to you.*
B-5 *Give as many reasons as you can telling why homogeneously grouped classes don't appeal to you.*
B-6 *Give as many reasons as you can telling why heterogeneously grouped classes don't appeal to you.*

At the top of each questionnaire, students participating in the study recorded both their names and chosen pseudonyms. All names reported in this study, including the name of the school and school system are pseudonymous. With each group completing the questionnaire, students and I read and discussed the questions together as a class prior to their answering them. When we got to this set, I reminded them that it was perfectly acceptable to give a negative response. For instance, when answering question B-4, Alexandra raised her hand and exclaimed,

"What if I don't like heterogeneous classes, Ms. Swor?"

"State that, Alexandra," I replied, "And if you feel that way about homogeneous classes," I continued, "state that, too."

This caused a few raised eyebrows around the room, and then a few delayed half-smiles as they began to see that they could write their opinion exactly and not get in trouble for doing so. No doubt more than a few had previously experienced the hazard of being at once twelve or thirteen, articulate, and sometimes impulsively opinionated. After this discovery, this class seemed to relax as they understood that I really wanted to know what they thought, whatever they thought.

Question B-3: Appeal of Homogeneously Grouped Classes

Table 6.1

Question B-3: *Give as many reasons as you can telling why homogeneously grouped classes appeal to you.* (percentage of students commenting on category listed)		
Category	Explanation	Frequency
Ability Level	While discussing ability level, students also often noted motivating factors (being pushed by peers to do better), stimulation, and relief in homogeneously grouped classes from different types of pressure.	73%
Pace	Of the 63% mentioning pace, more than half used phrases such as *not too slow, not bored, not held back, faster, and don't have to wait* in their answer.	63%
"Connections" among homogeneously grouped class members	Sub-categories of connections also emerged in student responses. They were • Intellectual Connections (3) • Social Connections (7) • Friendship Connections (7)	41%
Mentioning the word "challenge" or "challenging"	Students used these words in their responses.	27%

Ability Level

Table 3.1 indicates patterns of responses arising from the first of these four polarized questions. The most frequent reason gifted eighth graders mentioned in explaining why homogeneous classes appealed to them was that instruction was more apt to be appropriate for their personal ability level because ability levels of the majority of class members were more alike. Over 73% of the students discussed the appeal and importance of learning with those of similar ability:

Alexandra said, "I like being grouped homogeneously because I can learn more, have better discussions, have people I can relate too [sic], and many other things I can't remember right now."

Ashley's comment was "classes like this are good because you are on the same level as everyone else. You can also communicate and learn better in this kind of environment."

And Sigourney said, "They are people like me; they can understand what I say in class. We can talk easily & we can debate or discuss things on the same level."

In this response, Sigourney captured the observations and sentiments of several members of the gifted cohort. First, her observation that others in these classes are "like me" and therefore able to "understand" [me] was common. Second, her elucidation of the "like me/understand me" coupling—using examples of being able to talk easily, debate things, or discuss things on the same level—alludes to another major category arising from the data: "connections." Over forty percent of the gifted students discussed "connecting" or communicating with other gifted peers in a meaningful way, and pointed out different types of connections made among like-ability peers in homogeneous settings. Explained later in this chapter, these connections were further sub-divided into categories of friendship connections, social connections, and intellectual connections.

Pressure

Three of the students also indicated in their responses that congregating like-ability levels reduced different types of pressure that they sensed from other classmates or adults, such as negative peer pressure or pressure to perform.

Joe said, "People are on your same level, so you don't get bored or behind. And you aren't made fun of because you aren't smarter or dumber."

In the same vein, Ellie said, "I like them [homogeneously grouped classes] because you are in with people who are like you and you don't have the problem of people saying that you think you are above them."

Both Joe and Ellie expressed relief from negative peer pressure when grouped homogeneously. Joe discussed relief from taunts related to his ability level, and Ellie indicated

relief from the social pressure she felt when others stereotyped her as being smart and therefore arrogant.

It was only after reading Lauren's response several times that I understood the type of pressure she was talking about and why she felt less pressured in homogeneously grouped classes. She explained, "There are many reasons I like being homogeneously grouped. I like the fact that all people have the same abilities and use them the same way. People don't feel pressure to do better than everyone else when everyone does about the same in each class."

Many times academically able children are told by adults aware of their "gifted" status that they will be expected to "do more" and consistently rise to reach their potential. Although most try to oblige and perform accordingly, being the only one or one of a few saddled with such different expectations in a class with a wide range of abilities can become a burden or "pressure" that the child bears. If they excel at the higher standard expected by the teacher, classmates may ostracize or make fun of them. If they try to fit in and perform at levels similar to their classmates, the teacher and parents will be disappointed. It is a Catch-22. How much easier it must be, as Sigourney pointed out, just to be one of the gang "where everyone does about the same in each class."

Rory concurred when she wrote, "I feel more comfortable in a class [of like abilities] like that. I feel more better in a class were [sic] I know what other people know & they know what I know."

Another characteristic of the middle school child is the longing of preteens and early teenagers long to fit in—to merely be one of the crowd (Fenwick, 1987). Consequently, total reliance on differentiation in the regular or heterogeneously grouped classroom may frustrate the social-emotional needs of the middle schooler, particularly those with extreme, very high or low, ability levels.

Nick was an especially driven and conscientious student, particularly in math. When asked about the appeal of both like-ability and mixed classes in an interview, his focus on pace was clear:

LS OK. We're done with that section. Let's go on to the next one. Thanks for your responses about individual academic classes that you've had this year. Now I want to ask you some general questions about classes. Is there anything about homogeneously grouped classes that particularly appeals to you?

N Yes. Uh… the pace is usually more at… my pace. And so I can learn more… than I would at a heterogeneously… grouped class.

LS How would you compare… paces… between mixed and homogeneously grouped classes?

N Uh, in homogeneously class… uh… grouped classes, umm… it's much faster… than in heterogeneously class… uh… [sigh] grouped classes.

LS [laughs] I get… twisted on that, too. Umm, to change things around, is there anything about mixed classes that appeals to you?

N Not really. No.

Stanton also said, in responding to the same interview questions asked of Nick, that in addition to being with those of similar ability level, appropriate pacing was the main reason homogeneously grouped classes appealed to him. He said,

S Yeah… you're with people of the same ability level so… if the teacher… so the teacher can… put… have one… pace… and none will be… it won't really be too fast or too slow for anyone.

LRS O.K. How would you compare that to a mixed ability class?

S Well in a mixed class the teacher has to slow down for… the slowest people… and… those students that are higher than that… get behind… I mean not behind but… are really bored.

In this last response there is a slight indication of something Caryn referred to during an interview. She said when she gets bored, she gets behind. When I asked her to explain, she said that when she is bored, she cannot make herself pay attention, so she daydreams and then actually ends up getting behind in the class. Stanton may have been thinking about the same idea here.

Motivation

Although being with the same ability level was the most frequently mentioned reason homogeneously grouped classes appealed to them, students also wrote interesting comments about motivation. Nearly 27% of the gifted students used the word "challenge" or "challenging" in their answer to Question B-3. Often, these descriptors were juxtaposed or in the same sentence with responses related to ability or achievement level. For instance, Bill said, "The classes [homogeneously grouped] also offer a challenge on my level."

And Bruce wrote, " It also appeals to me because working with a group of the same ability will help to challenge me as a student."

Michael's comment on this question was somewhat more subtle because being challenged individually was not his sole focus: important to him also was being a member of a challenged group that was moving forward in the curriculum and excelling—together. He said, "I like homogeneously grouped classes because I have the opportunity to excel with the rest of the class and not be held back."

Caryn, in responding to an interview question about the appeal of homogeneously or heterogeneously grouped classes, explained why she found the homogeneously grouped classes more interesting or motivating:

LS OK. Thank you very much for your responses to those questions about individual academic classes that you've had this year. Now I 'd like to ask you some general questions about classes. Is there anything about homogeneously grouped classes that particularly appeals to you?

C Umm… that appeals to me? Some of the work is int… more interesting because they… give you … more complicated things. You don't just go generally into it, and then when you get interested, jump right back out of it. It's more in depth usually.

LS How would you compare that to a mixed class?

C Umm… usually you… touch up on the general, more of the general things than going into in depth or more specific things. Like in algebra you go, definitely deeper into math than you would… in eighth grade math because you'd just be touching up on all the little things you need to know when you go into algebra.

Pace

Michael's statement about not being held back was a common one; the second most frequently cited reason the gifted students gave when explaining why homogeneous grouped classes appealed to them related to time, speed, or pace. More than 63% mentioned such phrases as

John	…you don't have to wait….
Lana	…you don't have to wait….
Katherine	…you can work at your own pace….
Joe	…you don't get bored….
Will	…everyone goes at the same pace.
John	…people of the same ability… go at the same pace.
Rory	…at the right speed for everybody….
Bruce	…allows me to work with a group that works at my pace.
Scarlet	…no one is lost….
Boone	…you don't get bored….
K. T.	…you don't have to wait….
Elvin	…don't have to wait for other kids….
Mary	…does not take very long for everyone else….
Dale	…learn at their abilities and go at their own pace.
Jacque	…more challenging and you move at a faster pace….
Jim	…I don't have to be stuck….
Bart	…don't have to waste time waiting on people who need help….
Ben	…people don't slow down your learning and you can be challenged…
Samantha	…you work at your own pace…

Nick …you can go faster.

Although a few students expressed a desire to "go faster," I was struck by the number of children who specified their "own pace" or a speed that was right for them. And rather than express this need or desire in a boastful manner, many instead were careful to qualify their answers, making it clear that they only wanted the pacing of the curriculum to be appropriate for them. For instance, Krissy said, "When your classes are on the same level you are not pushed ahead or slowed down."

And Bill wrote, "Homogeneously grouped classes give me and other students the chance to work at a pace which suits my [our] needs."

Finally, Scarlet commented, "Everyone can go at the pace that they are supposed to."

Connections

The third most frequently discussed reason that homogeneously grouped classes appealed to this group of gifted eighth graders had to do with connections they drew between themselves and other students in their classes. Of the 17 (41%) who mentioned connections, seven referred to "better friendships" or "closer friends" or said things like "most of my friends are in there," "most of my friends are usually grouped with me," or "most of my friends are in the same class as me." John was most explicit when he said, "Since you make most of your friends by like's and dislikes, you are most likely [in a homogeneously grouped class to be] in the class with your friends."

Similarly, in addition to friendship connections, seven other students brought up different types of social or emotional connections to explain why homogeneous classes appealed to them. For example, Michelle and Stanton both expressed the benefit of having a common bond. Michelle said, "It is easier to get along with your classmates. Everyone has something in common," and Stanton concurred with "many people in these classes have the same interests as you."

Two of the boys brought up the importance of having others in class who "have the same problems" or "understand" their problems, and they also included the word "relate" or "relate to" in their answers. Mason said, "Homogeneously grouped classes appeal to me because many of my friends are in with me, almost everyone has the same abilities, I can relate to the other students, and most people have the same problems."

In a similar response, Richie said, "When you have problems, the other students are more likely to understand than those with different abilities.

Likewise, Alexandra, mentioned that she could "learn more, have better discussions, [and] have people [she] could relate too [sic]" in homogeneously grouped classes.

That the boys and Alexandra brought up the issue of having others with whom they could relate and share their problems reminded me of a comment I have heard more than once from educators speaking about gifted children. I recall hearing other teachers or administrators say that gifted children will "make it on their own" or "make it no matter what." These comments have always left me wondering what "it" is exactly—and scratching my head trying to figure out what it is that they will "make." Although the problems these two boys are referring to could be quite different from the problems of children of other academic ability levels, they might not be. The magnitude could be greater or smaller, but, regardless, these boys said here that they do have problems, and they do appreciate being able to connect with someone—a peer—who can relate to them on their level. Is not social and emotional growth, or being able to work through daily problems and issues with others who have felt the same or done the same, part of the "it" that the gifted students are supposed to be making? If "it" is only making good grades, getting high scores on achievement tests, or performing academically, then these gifted adolescents probably have "it" covered. But if school mission statements incorporating social and emotional growth into their definition of what schools are supposed to help children do are describing "it" for the gifted too, then these needs must be recognized for them as well. As these two boys attest, a gifted child needs a social and emotional sounding board and practice group comprised of those

with whom he or she can relate—just as much as the next student. But because the gifted are, by definition, a minority of sorts, a small group to begin with, not always many of them around, they especially may need the help of teachers and administrators to arrange consistent opportunities for them to find and spend time with those more like them. Now, even with definitions of the gifted and talented becoming broader and more inclusive, this still relatively small group of relators and relatees might appreciate and benefit from grouping options allowing them to interact with those who are "like them," "can understand" them, and "can relate" to them.

Last, Warrin, Meggin, and Lee brought up the final connection mentioned as a reason homogeneously grouped classes appealed to them—intellectual connection.

Warren said, "You get to know people on the same 'wave length' [his quotation marks] that understand you."

Meggin wrote, " the other students that don't understand the information can relate to me."

And Lee stated, "You can learn from other students."

Several things are worth noting about these comments and the children who wrote them. First, whether coincidence or not, the boys describing intellectual connections as reasons homogeneously grouped classes appeal to them, posted two of the highest IQ scores in the group of 41 gifted adolescents in the study, with Warren's score placing him in the "profoundly gifted" category. Considering the unusual nature of Warren's ability level, although academics may not be particularly difficult for him, one of his greatest challenges in life may be finding others, as he described, who are on the same wave length.

Second, Meggin's comment makes more sense once one is aware of the context of her experience. Meggin excelled in all academic areas, but was an exceptionally able math student who, at the end of the year, placed third behind two boys in her class in the city-wide math competition. Several months before the contest her algebra teacher, Mrs. Milner, made arrangements with the librarian for the math team to meet twice a week in the library during

algebra class. These students sat at two tables, and, on their own, supervised only from afar by the librarian, progressed through the final chapters of their algebra book. I observed this group in the library on two occasions. Both times, Meggin was animated in away that I had not noticed elsewhere, flitting like a butterfly back and forth between tables, explaining math concepts and problems to various teammates who needed help. Her laughter and silliness while assisting others made it apparent to anyone watching that she thoroughly enjoyed this role as peer-instructor. Thus, when I read Meggin's response, I considered the context of the study group she so enjoyed, and her animated behavior while "teaching" the other math team members. She was pleased that students who didn't "understand the information" could "relate to" and learn from her. With her study group consisting of the most able math students, she could and did experience the joy of teaching them at a high level. But would it have been possible for her to have experienced the same social, emotional, and intellectual interactions in a heterogeneously grouped class? Probably not. This handful of the best eighth grade math students was a subset of the already homogeneously grouped algebra class.

The flip side of Meggin's comment was articulated by Lee. Meggin could teach other highly able students; Lee could learn from them. If the academically gifted are, by definition, a small group scoring in the upper reaches of achievement or aptitude measures, then their opportunity to learn from or be intellectually stimulated by classmates are, in a random grouping, statistically fewer than those of any other ability group. Here, the old saying of "it's lonely at the top" applies. The extent to which they are intellectually "lonely" is a function of the magnitude of the difference between their ability and achievement level versus that of the rest of the group or their classmates. In a homogenously grouped class, the possibility of their teaching and learning from others increases. This established, the next question is, in light of all of the other considerations educators must take into account when arranging learning experiences for children, do we really care whether academically able children such as these are provided with

experiences conducive to social, emotional, and intellectual connection-making for them at their level? And if we care, how much, and how much must we care before we act on their behalf?

Question B-4: Appeal of Heterogeneously Grouped Classes

Table 6.2

Question B-4: *Give as many reasons as you can telling why heterogeneously grouped classes appeal to you.* (percentage of students commenting on category listed)		
Category	Explanation	Frequency
Can Meet New People/See Other Friends/Have Social Variety	Students reiterated the appeal of meeting new people, seeing other friends who "aren't in the rest of your classes," and finding "variety in people."	49%
No Appeal	Students either drew a line indicating that they could not give a reason that heterogeneously grouped classes appealed to them, or they stated that heterogeneously grouped classes did not appeal to them.	39%
Easier Classes/ Less Pressure	Students stated that heterogeneously grouped classes were less of a challenge, easier, or caused less pressure to "keep up."	7%
Provides a Break	Students mentioned the appeal of having a break from "being with the same people all the time."	7%
Can Learn From or About Others	Students discussed learning how other people feel or think, and they also stated that others in heterogeneously grouped classes had talents to share that were different from their own.	7%

No Appeal

Although only one of the gifted students in responding to question B-3 said that she did not like homogeneously grouped classes, 39 % of the same group indicated that heterogeneously grouped classes did not appeal to them. This was the second most common response to question B-4. When asked to give as many reasons as they could telling why heterogeneously grouped classes appealed to them, their responses included:

Bill	_____ [line across answer space]
Alexandra	I can't think of any.
Lana	They don't.
Wil	_____ [line across answer space]
John	I don't care for heterogeneously grouped classes.
Brent	Heterogeneously grouped classes really don't appeal to me but when they do it's because the class is fun.
Krissy	I don't care for this type of class at all.
Bruce	Heterogeneously doesn't appeal to me at all.

Scarlett — I really don't like to be grouped heterogeneously. The only thing that I like is that I have some friends in other classes that aren't on the same level intellectually.

Mary — Heterogeneously [grouped] classes do not appeal to me very much when grouped by academics because it seems the teacher does not have as much time for you opposed to being helped a lot individually when in homogeneous classes.

Jacque — They don't.

Ben — they don't

Meeting New People, Mixing With a Variety of People

Almost half of the gifted cohort, however, in response to Question B-4, indicated that a reason heterogeneously grouped classes did appeal to them was that, in these classes, they were able to meet new people, mix with a variety of people, make new friends, or see other friends whose academic ability levels were different from their own. Some of the students who specified that the appeal had to do with meeting others of other ability levels were Boone and Scarlet. Boone said, "This type of class lets you meet other people at other learning levels than you."

And Scarlet wrote, "The only thing that I like is that I have some friends in other classes that aren't on the same level intellectually."

Most of the other students acknowledged the advantage of seeing a variety of people in their heterogeneously grouped classes, and some pointed out ways that they might learn about or from others. First, the more general comments about social variety:

Aubrey	Heterogeneously grouped classes give you more variety and a chance to meet new people.
Michelle	You can meet many other new people and be in classes with other friends who aren't in the rest of your classes.
Caryn	…I can be with more of my friends.
Mason	…most of my friends are in them….
Stanton	You get to meet new people you would not otherwise meet. I have made several friends that I would not know otherwise. I generally do not like these classes at all, though.
Azariah	…most of my friends are in different classes and we get a chance to be together.
Ashley	…you get to know a whole bunch of new people. You also meet new friends.
Katherine	… you can be with people that you usually don't have in your other classes.
Joe	You meet new people.

Sigourney I can see other people, & find out what they're doing.

Lauren Heterogeneously grouped classes might give me a chance to see other friends.

K.T. …there is a different variety of people there.

Kate …you get a chance to meet new people.

Bart …you have a chance to see different people and make new friends.

Samantha Variety in people.

Additionally, three students said that being in a heterogeneous class gave them a break from being with the same people all day. Ellie, in describing the appeal of both homogeneously and heterogeneously grouped classes, and summarizing points made by several students concerning the appeal of homogeneously grouped classes, mentioned the value of a break, saying that it was "kinda fun" in heterogeneously grouped classes:

LS Umm hum. All right, thank you for those responses about individual academic classes. Now I'd like to ask you some general questions about classes. Umm… is there anything about homogeneously grouped classes that particularly appeals to you?

E Umm… the teachers don't have to worry about bring down the… the level of thinking the class, you know, so every one can understand. It

can go at a fast pace and you can learn more detailed things that are up at your level.

LS How would you compare that to a mixed class?

E O.K. In a mixed class I think the teacher has a lot to worry about, about what I just said. You know, about having to bring the level of the, you know, class thinkin' down, so everyone can understand. And umm, so you don't learn as much, and you don't go as fast in a mixed class as you do in a heterogeneously grouped class.

LRS O.K. To change things around, is there anything about mixed classes that appeals to you?

E Yeah, they're, they're easier and they kinda, they kinda give me a break. Instead of having to worry about, you know, everything in order and going so fast, and having to know what's going on, you know, it's kinda of fun, you know, just being able to sit back, and, you know, have kind of an easier class.

Three students also mentioned that heterogeneously grouped classes were easier and required less pressure to keep up. For example, Richie said, "The challenge is less and I can do better overall."

Mason said, "…they [heterogeneously grouped classes] are easier than my academic classes…."

And Ellie explained, “I like these classes because you can ‘relax’ [her punctuation marks] in them and not have the pressure of having to ‘keep up’ [hers also] with the other kids.” Also, Michael made a point subsequently that less effort was required of him in heterogeneously grouped classes, but offered this as a criticism rather than as an appeal.

Warren, Selene, and Sigourney mentioned that another appeal of heterogeneously grouped classes was that being in them allowed them to learn from or learn about others. For instance, Warren said, “You can get to know different types of people and how they feel.”

Selene commented, “These classes appeal to me because I am different than everyone else and I have the chance to be mixed with people who have different talents that I can learn from.”

And Sigourney pointed out that “You can learn more about people by talking to different kinds of people.”

Three of the boys offered answers to this question that reflected dissatisfaction or frustration with heterogeneous classes or peers in those classes. For instance, Nick said, “You meet other people although most are red-necks.”

Lee said, “You can review stuff that you learned a while ago. You can see how far other kids are behind. You make better grades because the class is slower paced.”

And Michael said, “Heterogeneously grouped classes do not appeal to me because those who can, get ahead, but most wait for the rest of the class to catch up. The only thing that appeals to me about these classes is the amount of effort they require. On an average that is about .0001%.”

Rory’s answer to this question was especially thoughtful because, although she had concerns about heterogeneously grouped classes for herself, she recognized that such groupings could be helpful for others. She said, “I think that with heterogeneously grouped classes people are challenged to keep up with others, which may help them alot [*sic*]. But, I wouldn’t want to be in a class like that because I wouldn’t want my education to be held back.”

Another miscellaneous idea thrown out by Ben was "having students grouped heterogeneously is good in classes where intellectual ability isn't necessary."

The Stereotype of the Gifted as Elitists

I noticed two things when I read through the responses to question B-4. The first was that no more than three of the 41 in the gifted cohort may have expressed a condescending attitude toward others who were less academically able, while some of the students, on the other hand, suggested that they could learn from other nongifted peers about how they feel, or think, and indicated that others with talents different than their own had something to offer them.

Nick's comment about red-necks could have been meant to belittle those less sophisticated or academically able. But it could have also been an expression of dissatisfaction with the poor behavior of those who were ill-mannered, didn't care about school, or liked to fight, and may have consequently had little to do with academic ability. Rory defined the word this way, referencing those who did not care about school, in her response to a different question. Also, Lee and Michael's comments about how behind kids were, and the slow pace or miniscule effort demanded of them as students, appeared to focus as much on dissatisfaction with the pace and standards of heterogeneously grouped classes as on other students themselves who were in these classes.

Besides the responses of the three boys described previously, the overall lack of arrogance of the rest of the gifted cohort and their willingness to recognize and value other types of ability and talent in the less academically able challenges a recurrent characterization of the gifted, especially those spending the greater part of the school day in like-ability groups, as being haughty, deprecating, and elitist toward their nongifted peers (Hastings, 1992; Oakes & Lipton, 1990). As one who has endured 181 days annually of eight-grader scrutiny for thirteen years, I consider the fact that no more than three of the gifted children responded to this question by contrasting their own strengths with those of the less academically able in order to express

superiority—out of all of the responses—remarkable. For in the self-critical and generally critical world of the eighth-grader, not much is secret, less is sacred, and, in my experience, almost nothing goes unnoticed. Every haircut I got for thirteen years was rated on a two point scale according to the following comments: "What happened to your hair, Ms. Swor?" (1 point—bad), or "Your haircut looks good, Ms. Swor!" (2 points—good). Moreover, general announcements were made when my toenails were polished or the color changed, and any silly mistake or funny (to them) thing that I said was mentally recorded, shared with family members at the dinner table that night, and then summarized for me the next day, complete with in-depth critical commentary from family members—as a matter of course. That is just the way it was. And I would speculate that I was probably afforded some preferential treatment by some because I was, after all, the teacher. For the average eighth grader, precise personal assessments were made, spoken, discussed, and forgotten (most of the time) on a daily basis. The next day, a new cycle would begin. That 93% of the gifted children, excepting the three boys, said little that could be construed as condescending toward other classmates with different ability levels, demonstrates that the haughty or "elitist" characterization of the gifted child, at least as illustrated in this group, is probably more stereotype than fact.

Describing the Appeal of Peer Interactions and Friendships—But Few Connections

The second thing that struck me about the answers the gifted gave to question B-4 concerning reasons heterogeneously grouped classes appealed to them had to do with a distinction they made, by omission, concerning peer interactions and friendships. In their answers offering reasons why homogeneously grouped classes appealed to them, or to question B-3, reasons involving friendships or peer interactions usually came in two parts. First, the students designated the relationship or relationships with peers, and then they explained the connection that they felt or perceived with that person or group. Using phrases such as "like me," "understand me," "relate to me," and "on the same wave length," they meticulously expressed

first the relationship and then the connection. Conversely, when responding to question B-4 concerning reasons why heterogeneously grouped classes appealed to them, although they discussed existing friendships in these classes, expressed the desire to make new friends and meet new classmates and sometimes take a break from their like-ability peers, none described connections similar to those so carefully related when discussing peer relationships in homogeneously congregated classes. Thus, intellectual, social, and emotional connections with friends or peers were carefully delineated in responses concerning the appeal of homogeneously grouped classes, and they were almost completely absent in responses describing friendships or peer interactions as a reason for the appeal of heterogeneously grouped classes. In short, it appeared that though these gifted children were pleased to create friendships and interact with their peers in both types of groupings, they discriminated between different types of peer interactions and friendships within different types of class groupings. In homogeneous class groups they specified types of connections that they felt or noticed among their peers; in heterogeneous class groups they emphasized variety in friendships—but did not describe specific types of connections they felt or perceived. Although they appreciated new friends and the chance to visit with other friends in heterogeneously grouped classes, they did not express or explain particular social, emotional, or intellectual connections that they had with these peers in these classes. Only the three students who wrote about learning from or about their nongifted peers suggested, albeit more vaguely, a connection that they recognized. As noted previously, feeling connected is important to the social and emotional well-being and intellectual development of the academically able child—or any child; consequently, consistent provisions should be made for these children to congregate so that connection-making can occur. Also, further investigation of the types of connections that gifted children make with less academically able peers in heterogeneous settings would contribute to our understanding of the social, emotional, and intellectual connections described by the gifted students in this study.

Question B-5: Lack of Appeal of Homogeneously Grouped Classes

When for question B-5 students were directed to list as many reasons as they could telling why homogeneously grouped classes did not appeal to them, responses varied more than those given for prior questions.

Table 6.3

Question B-5: *Give as many reasons as you can telling why homogeneously grouped classes don't appeal to you.* (percentage of students commenting on category listed)		
Category	Explanation	Frequency
No Reasons/ Homogeneously Grouped Classes Do Appeal	Students either stated they could think of no reasons, wrote "none," drew a line to signify none, or stated that homogeneously grouped classes did appeal to them.	27%
Same People	Students commented that a lack of appeal was that they had the same people in their classes, less social variety, or were with the same kids year after year.	24%
Academic Pressure	Student responses were that sometimes classes were too difficult or more work, and they also wrote that they occasionally felt pushed or pressured.	17%
Concern for Those "Left Out"	Students expressed concern that grouping homogeneously can make "certain people feel bad or left out," that "you can tell who the smart-dumb classes are," and that "everyone has special gifts and these classes can make some people feel dumb."	10%
Being Stereotyped as Nerds	Students did not like being stereotyped or called a nerd.	7%
Stuck-up Peers	Students stated that some of their peers were "little tight wads" or "may think they're better than you are…."	5%
Competition	Students complained that other students were at times too competitive.	5%

No Reasons—Homogeneously Grouped Classes Do Appeal

In answering this question, several gifted students again indicated the overall appeal of homogeneously grouped classes by responding negatively here. The most frequently recorded response to question B-5, given by 27% of the students, indicated that there were no reasons that homogeneously grouped classes did not appeal to them. Four students drew a line across the answer space indicating no reasons, three listed answers in a few words: "There are none," "none," and "They do," and the rest responded thusly:

Kristin "Overall, I like homogeneously grouped classes."

Krissy "These classes do [double underlined] appeal to me!

Rory "…homogeneously grouped classes do appeal to me, so I have no reasons.

Nick "I can't think of any reasons"

The Same People

Beyond listing no reasons, negating the negative form of the question, or stating that homogeneously grouped classes did appeal to them, the second most common response was consistent with the pattern of responses given to question B-4 regarding social variety. Nearly 24% of the gifted cohort's answers to question B-5 suggested that students sometimes got tired of being with the same crowd.

Michelle "You will always have the same people in your classes and won't be able to meet many other people."

Caryn "A reason homogeneous doesn't appeal to me is because there is no variety."

Sigourney "Everyone is sort of alike and it gets boring."

John "It does not appeal to me in one way. I do not like sitting next to and being with the same kid(s) year after year."

Scarlett "I don't get to see my friends that are on different levels."

Meggin "I'm in classes with the same people for five subjects."

Kate "You also end up being with the same people all day."

K.T. "After a while you might get sick of being with the same people who are all at the same level."

Mary "…sometimes you get tired of the people you're with."

Joe "There is not much individuality in those classes."

Although it could have been mere coincidence, it was intriguing to note that over two-thirds of those commenting on a lack social variety in homogeneous classes were girls. When I noticed a heavy weighting of girls here, I was curious to see if those who had listed that there were no reasons that they didn't like homogeneously grouped classes were mainly boys. When I checked, however, the split between genders was fairly even among respondents for that category: six boys to five girls. Still, there is a subtle suggestion in these responses that social variety may have been more important to the girls in this study than it was to the boys.

Academic Pressure

Six (15%) of the students in the gifted cohort commented on the work load in homogeneously grouped classes or wrote about feeling "pushed," "too challenged," or "feeling pressured." Their responses were

Richie	There is too much challenge and I can't handle it sometimes.
Alexandra	We have too much homework and much more pressure.
Katherine	They don't appeal to me because you are always pushed to do your best because everyone is doing well.
Bruce	…sometimes you can almost feel to [sic] challenged but don't want to ask the teacher for help because it may slow up the rest of the class.
Elvin	The kids are much smarter than me so they usually understand much quicker.
Jacque	more work

Concern for Those "Left Out"

Four students (10%) said that a reason homogeneously grouped classes did not appeal to them was others who might feel left out or feel dumb. Said Bart, "They don't appeal to me because it can make certain people feel bad and feel left out."

Azariah commented, "They [homogeneously grouped classes] don't appeal to me sometimes because if you don't get put in Challenge, you might feel dumb."

Selene said, “Everyone has special gifts, and these classes can make some people feel dumb.”

And Kate said, “You can tell who the smart-dumb classes are.”

Several researchers such as Slavin (1987, 1990), Oakes (1985), and Wheelock (1992) share the concern expressed by these members of the gifted cohort and have written extensively about it. Oakes and Wheelock, in particular, have suggested eliminating tracking or homogeneously grouped classes as the way to address such concerns. Others, however, such as Kulik (1998) have warned that wholesale elimination of tracking or like-ability class groupings is not only detrimental to those who consistently benefit from it, such as the gifted, but pointed out that doing so removes a viable option for other ability groups as well (Loveless, 1998). Sternberg, in moderating a discussion between proponents of both tracking and detracking, once quipped that those who are against ability grouping have never taught statistics (1994). The same could be said of other subjects involving great disparity in achievement in the classroom. And finally, Hallinan (1987) suggested that more research needs to be done comparing optimally created homogeneously grouped situations with optimally created heterogeneously grouped situations for low achieving children.

What did these responses about concern for those left out suggest about the children who made them? Here again, I saw a very different picture of the gifted student than is sometimes portrayed by those who insist that homogeneously grouping or even providing special services for the gifted breeds haughtiness or elitism. On the contrary, many of the students responding to question B-5 not only pointed out that a liability of being grouped homogeneously was the reduction in opportunities to mix with other children, they also expressed concern for the feelings of other children not in their classes who could be negatively impacted by such groupings.

Stuck-Up Peers, Competition, The Nerd Name

When two (5%) other children did point out "stuck-up" behavior of peers in their homogeneously grouped Challenge classes, they stressed that this behavior was directed at or relative to them, the other gifted kids in the class, not those of lesser ability. For instance, Warren said, "Some of the people may think they're better than you are or may bury their nose in their book and try not to be friend[s] with anyone."

And Mason wrote, "…a lot of the students are just nerdy little tight wads and don't know how to have fun."

Finally two students (5%) discussed competitiveness of some of their peers in their homogeneously grouped class, and three (7%) said being stereotyped as nerds was a reason homogeneously grouped classes did not appeal to them. The sting of this name, though seemingly minimized by its use and caricaturization in so many children's movies, continues to be felt.

The numbers, or percentages of like responses, to question B-5 are telling. A few students made observations in listing competition, haughtiness of others, and being called a nerd as reasons that they didn't like homogeneously grouped classes. Yet, there were other more commonly stated responses. Over one quarter (27%) of the gifted cohort gave no reason that homogeneously grouped classes did not appeal to them, and about the same number (24%) indicated that a lack of appeal for such classes was that such groupings reduced social variety. Additionally, six of the gifted cohort (15%) related that they sometimes felt pushed or pressured academically, either by being with other higher ability students who were moving at a faster pace or by having more work or homework in these classes. And last, four students (10%) expressed concern for other students who might feel dumb or left out when classes are grouped homogeneously.

Question B-6: Lack of Appeal of Heterogeneously Grouped Classes

Table 6.4

Question B-6: *Give as many reasons as you can telling why heterogeneously grouped classes <u>don't</u> appeal to you.* (percentage of students commenting on category listed)		
Category	Explanation	Frequency
Lack of Challenge/Lowered Achievement/Ability Level Needs Not Met	Students responded by indicating their frustration and boredom in heterogeneously grouped classes when they were unable to achieve at their own level.	56%
Pace	Students used word and phrases like "slower," "held back," "wait," and "wait for the others" when discussing pacing in heterogeneously grouped classes.	46%
Peer or Peer-Relationship Problems	Students indicated that they sometimes felt uncomfortable or frustrated in heterogeneously grouped classes. They also mentioned others who were unmotivated, obnoxious, or trouble-makers, and those who made it difficult to excel.	34%
Mentioning the phrases "not challenged" or "not challenging" or "unstimulated"	Students used words such as "unstimulated," "not challenged," or "lack of challenge" when discussing reasons heterogeneously grouped classes did not appeal to them.	17%
Name-calling (Nerd)	Students stated that they did not appreciate being called a "nerd" or "brainy" in these classes.	5%
Teachers/Teaching	Students observed that teacher's time must be split between different ability groups, and also suggested that teachers did not care as much in heterogeneously grouped classes.	5%
Heterogeneously Grouped Classes <u>Do</u> Appeal	Students stated they could think of no reasons, or stated that heterogeneously grouped classes <u>did</u> appeal to them.	5%

Lack of Challenge/Lowered Achievement/Ability Level Needs Not Met

When offering reasons why heterogeneously grouped classes did not appeal to them, most of the gifted children responding (53%) discussed boredom, the lack of challenge, and their inability to achieve at their own ability level in these classes. When describing the lack of challenge, eight students (20%) said,

Bill — Heterogeneously grouped classes can't really work on any level. Some students need more of a challenge than other students.

Caryn — Heterogeneously [grouped classes] don't appeal to me because of the lack of challenge.

Azariah — They don't appeal to me because it is unfair to challenge kids not to be challenged on their own level….

Herman — It keeps the brighter students from being challenged….

Michael — Students who have greater ability easily get ahead and most wait for the rest of the class, also they do not challenge [extra word] have a chance to challenge themselves.

Dale — Gifted children may be unstimulated.

Jim — They don't appeal to me because I would be grouped with less knowledgeable or less intelligent people, I wouldn't have a challenge, and I wouldn't learn as much.

Ben [In these classes] you cannot be challenged along w/ people of your own ability.

When discussing concerns about boredom in heterogeneously grouped classes, and emphasizing their needs and those of their less academically able classmates to be able to learn on their own levels, they wrote,

Lana …you have to go over things you already know.

Katherine I do not like heterogeneously grouped classes because you are put with people that are not at the same level as you and you will either feel stupid or that your are a nerd.

Ellie These classes, if they are academic and not exploratory, easily bore me because most of the other people are a little bit slower and I've had the information before so I already know it.

Joe You are either smarter or dumber than the rest of the kids in your class.

Krissy In these classes students often struggle by being pushed ahead. Often the smarter people in these classes become bored and are being slowed down.

Bruce …don't appeal to me because a majority of the class may not be on the same level as I'm on and that causes the rest of the class to be held back.

Scarlet	Some people have to go to [sic] fast and can't keep up. Also some people are slowed down and tend to get bored.
Mary	Heterogeneously grouped classes do not let you do very much, as in excel, I think. Otherwise, I have no objection to it.
Samantha	…because people can be confused or bored because people differ in their abilities.
Bart	They don't appeal to me in that sometimes a class might get boring because the other people can be slower than you.

The gifted students' analysis, indicating their perceptions of liabilities of heterogeneously grouped classes, are based on their school experience over the prior eight years. Since these data were collected in 1990, students are referring to their school experience in the latter 1980s. If these children were actual adult researchers, their observations and assessments over this time period would be considered relatively current when considering that Slavin's (1987, 1990) and Kulik's (1982, 1984, 1991, 1992) research syntheses relied mainly on studies dating before 1975, and data analyzed in Oakes's (1985) book promoting detracking were collected in the late 1970's. From the students' responses given in 1990, however, it appears that educational innovation in meeting the needs of the gifted in the regular classroom had not yet reached them. In addition to expressing their own boredom and frustration due to the lack of challenge or intellectual stimulation in heterogeneously grouped classes, they pointed out the problems and struggles of their less academically able peers as well when all levels were taught together. Since 1990 when

students responded to these questionnaire items, teachers at Laurel Falls Middle School have received little training in meeting the needs of the gifted or other special populations in the regular classroom, and services for gifted middle schoolers have been either absent or ill-defined.

Pacing

Reasons related to pacing were the second most frequently listed (46%) by gifted students to explain why heterogeneously grouped classes did not appeal to them. Because pacing concerns often went hand in hand with a perceived lack of intellectual stimulation for the gifted, and an inability to learn and achieve at appropriate levels in heterogeneously grouped classes, student often, in the same sentence, made references to inappropriate pacing and inappropriate challenge for either them or their peers or both when responding to this question. Their responses were:

Aubrey The students not on our level can slow you down in heterogeneously grouped classes.

Stanton You have to wait behind for all the students that don't work as fast as you.

Ashley They don't because other people in the class that are not as smart as you, slow you down in your lessons and you are not used to going that slow.

Alexandra I can't pay attention, the class moves slower….

Lana …because you can't work as fast as you want to and it is usually

slow….

Katherine I also don't like it because if some people are of a low level they may slow down the class.

Herman …you either have to slow down or speed up….

K.T …don't appeal to me because sometimes you have to wait up for people who are at a slower level than you.

Meggin I don't like these classes because the teacher goes too slow.

Warren You may move at a faster pace than the others in the class.

Elvin The dumb kids slow up the class….

Ben Class move SLOWLY.

Nick I would be going much slower than if I would be homogeneously [grouped].

Clearly, pace was and continues to be an issue with the highly academically able, particularly in secondary school. Csziksentmihalyi (1988), in describing *Flow* explains that in order to reach this state of motivation, a task must be neither too difficult, resulting in frustration, nor too easy, resulting in boredom Also given Bloom (1985) and Whitehead's (1929) three-stage theories of development, students' focus on pace is no surprise (see Chapter 4 of this document).

In the middle stages of talent development, students' desire and need to progress more quickly in their chosen talent field increases naturally. And, in order to reach the terminal stage of talent development, they must in the middle stage be able to progress as quickly as they are able—or ultimately deal with the consequential frustration and stress that accompanies unfulfilled potential, goals, and dreams.

Peer or Peer-Relationship Problems

The final most frequently mentioned category from question B-6 had to do with peers or peer relationships. Some students' responses (34%) suggested that they felt insecure, frustrated, or uncomfortable with their peers in mixed-ability classes, while others pointed out that their peers' behavior in these classes was unkind or unacceptable, and others asserted that their peers were unmotivated or made it difficult for others in the class to learn. Michelle expressed feelings of uncertainty in dealing with peers in a mixed-ability class when she said, "You may not know anyone in a class. Everyone is different and maybe not like you are."

Expressing some similar thoughts, Sigourney said, "At first, there are some people in heterogeneously grouped [classes] that you just don't feel comfortable with."

And Selene commented, "They [heterogeneously grouped classes] appeal to me in all ways except for that some people in these classes don't have any drive and encourage you not to learn."

But the greatest show of passion came from students who either just didn't like some students in heterogeneously grouped classes or who had been frustrated or picked on by others in these classes.

Concurring with Selene, but with much stronger feeling, was Rory when she stated, "Heterogeneously [grouped] classes don't appeal to me because people who don't care about school may be in there. I wouldn't want to put up with that. I can't stand rednecks."

Equally adamant was John, whose frustration was evident when he said, "I hate, with a passion, heterogeneously [grouped] classes because they are very frustrating for the kids in Challenge classes. The kids in the below average classes make it very [triple underlined] hard to excel."

And Boone, a boy who was smaller than some of the other boys, said, "Some people will pick on others because they are bigger and stronger or not as smart."

Stanton also indicated past trouble with mixed-ability peers when he said, "…many of these people treat you like dirt."

Brent, too, related occasional social challenges with peers when he said, "Heterogeneously grouped classes don't appeal to me because once in a while you have to work with ignorant or obnoxious people."

And finally, Alexandra flatly stated her feelings when she said, "…there seem to be more trouble makers, I may not associate with the people well, …and I simply don't like most of the people."

Two other students also expressed their displeasure at being called a nerd or "brainy" in heterogeneously grouped classes.

An argument of antitracking proponents is that removing the gifted from the regular class leaves fewer role models for the other students. Yet results from two studies conducted in 1987 contradict findings of some prior studies about role models and show that lower ability students will likely not model higher ability students and rather will choose someone more like themselves as role models (Schunk, Hanson, & Cox, 1987). Also found was that the achievement of other members of the class does not suffer when the highest achievers are removed (Schunk, 1987). So this leaves the gifted child in the regular classroom often in the role of buffer who is routinely assigned a seat between children who are behavior problems. Instead of continuing with what has always been done in the past while sacrificing the achievement of the gifted child to keep peace in the classroom, it makes more sense to address the frustrations of the children who are neither

engaged nor happy. Meeting their needs is entirely the joint responsibility of adults in the school, parents, and the frustrated children themselves—not that of the gifted child or any child sitting next to them.

Final major categories emerging from this data were both surprising in some ways and predictable in others because many responses and emergent categories supported patterns of response that had become evident in responses to prior questions. These, of course, are categories related to the gifted cohort's focus as a group on being challenged to achieve at their own ability level and pace.

What was most surprising to me about responses to Question B-6 was the number of children discussing problems with peers in heterogeneous classes. Every day disagreements are bound to occur in middle school, and gifted children will be involved in them from time to time just as others are. But no child should have to deal with the frustration John expressed. Neither he nor his classmates should have to fight to learn, or be in a class where the other kids "make it very hard to excel."

One other thing that was somewhat surprising about the responses these students gave to this question, B-6, and to all prior questions, B3-B5, was that, although all four questions in this polarized set were open-ended, in that students could describe any appeal or lack of appeal of homogeneously or heterogeneously grouped classes that came to mind, only three wrote about teachers. Alexandra said that teachers in mixed-ability classes "don't seem to care as much," and Bill, in response to this question, and Mary, previously, pointed out that in such classes the teacher's time was split between those in different ability groups.

Last, two students (5%) in the gifted cohort stated that there were no reasons heterogeneously grouped classes didn't appeal to them. Said Richie, "I can't think of anything," and Mason concurred with, "I can think of no reasons that heterogeneously grouped classes don't appeal to me."

CHAPTER 7

BROADER IMPLICATIONS

Overview

Over a nine-week period in the spring of 1990, I observed and interacted with 41 gifted eighth-graders at Laurel Falls Middle School (a pseudonym) and their classmates and teachers in an effort to investigate and ultimately describe how homogeneous versus heterogeneous grouping structures affect students' perceptions of their achievement, motivation, peer interaction, and self-esteem. Data were collected in the form of observations, interviews, artifacts, and questionnaires. Responses by the gifted cohort to questions on two different questionnaires, *Questionnaires A and B,* were selected for analysis in this document. From *Questionnaire A* data, demographic information about the students was developed and the history of each individual child's experience in gifted programming was traced and is discussed in Chapter 3. On *Questionnaire B*, students responded to six in-depth questions designed to elicit their perceptions of their motivation, achievement, peer-interaction and self-esteem in homogeneously grouped classes collectively and heterogeneously grouped classes collectively.

Using analytic induction and constant comparative analytic procedures, data were searched for emergent patterns by which relevant categories for sorting data could be created. While being coded and categorized, data were constantly compared and triangulated across data sources. Data were then aggregated, organized, synthesized, interpreted, and reported. Raw data and the logical processes by which they were compressed are provided in Chapter 6. In reviewing the data and analysis from this study, several interesting facts, ideas, and questions have come to light.

Emergent Perceptions of the Gifted Cohort

When responding to the four polarized questions from *Questionnaire B* listed on the next page, gifted students in this study commented on the appeal or lack thereof of homogenously versus heterogeneously grouped classes. In so doing, they provided insight into their perceptions of the effect of homogeneous versus heterogeneous grouping on their achievement, motivation, peer-interaction, and self-esteem. As middle school children mature and move through two developmental stages described by Piaget as the concrete operations stage and the formal operations stage, they are able to hold several variables in mind simultaneously, yet "in the young adolescent, these newly attained formal operations often are not under full control" (Wiles & Bondi, 1986, p .22) Consequently, I purposefully arranged this set of questions in a polarized fashion to provided students with a structural frame for their answers and thereby assist them in analyzing and articulating their own thoughts, feelings, and opinions. The questions were

B-3 *Give as many reasons as you can telling why homogeneously grouped classes appeal to you.*
B-4 *Give as many reasons as you can telling why heterogeneously grouped classes appeal to you.*
B-5 *Give as many reasons as you can telling why homogeneously grouped classes <u>don't</u> appeal to you.*
B-6 *Give as many reasons as you can telling why heterogeneously grouped classes <u>don't</u> appeal to you.*

Analysis of students' responses resulted in the emergent categories listed in the abbreviated tables below. More detailed explanations of each category in addition to examples of raw data and their interpretation can be found in Chapter 6 of this document. Several examples from Chapter 6 are excerpted here for the sake of continuity and ease of reading.

Table 7.1: Tables for Questions B3-B6

Question B-3: Give as many reasons as you can telling why **homogeneously** grouped classes appeal to you.

Category	Frequency
Ability Level	**73%**
Pace	**63%**
"Connections" among homogeneously grouped class members	**41%**
Mentioning the word "challenge" or "challenging"	**27%**

Question B-4: Give as many reasons as you can telling why **heterogeneously** grouped classes appeal to you.

Category	Frequency
Can Meet New People/See Other Friends/Have Social Variety	**49%**
No Appeal	**39%**
Easier Classes/ Less Pressure	**7%**
Provides a Break	**7%**
Can Learn From or About Others	**7%**

Question B-5: Give as many reasons as you can telling why **homogeneously** grouped classes don't appeal to you.

Category	Frequency
No Reasons/ Homogeneously Grouped Classes Do Appeal	**27%**
Same People	**24%**
Academic Pressure	**17%**
Concern for Those "Left Out"	**10%**
Being Stereotyped as Nerds	**7%**
Stuck-up Peers	**5%**
Competition	**5%**

Question B-6: Give as many reasons as you can telling why **heterogeneously** grouped classes don't appeal to you.

Category	Frequency
Lack of Challenge/Lowered Achievement/Ability Level Needs Not Met	**56%**
Pace	**46%**
Peer or Peer-Relationship Problems	**34%**
Mentioning the phrases "not challenged" or "not challenging" or "unstimulated"	**17%**
Name-calling (Nerd)	**5%**
Teachers/Teaching	**5%**
Heterogeneously Grouped Classes Do Appeal	**5%**

Ability or Achievement Levels and Pace

By scanning response tables one can quickly see that the issue brought up most frequently by the gifted cohort in discussing the appeal or lack thereof of homogeneously versus heterogeneously grouped classes generally, was being able to work at their own ability or achievement levels. When telling why homogeneously grouped classes appealed to them, 73% of the gifted eighth-graders made comments suggesting that in those classes instruction was more apt to be appropriate for their personal ability level because ability levels of the majority of class members were more alike. Conversely, when telling why heterogeneously grouped classes didn't appeal to them, over half (56%) mentioned frustration and boredom in heterogeneously grouped classes when they were unable to achieve at their own level. Ellie expressed her opinion by saying, "These classes, if they are academic and not exploratory, easily bore me because most of the other people are a little bit slower and I've had the information before so I already know it."

In addition to describing the tedium of mixed-ability classes for themselves, a few of the students also pointed out the problems or struggles of their less academically able peers when all levels were taught together. Scarlet said, "Some people have to go to [*sic*] fast and can't keep up. Also some people are slowed down and tend to get bored.

Similarly, Samantha wrote, "…because people can be confused or bored because people differ in their abilities."

Besides mentioning being with the same ability level as a reason homogeneously grouped classes appealed to them, several students made comments related to motivation. Nearly 27% of the students mentioned the word *challenge* or *challenging* when discussing the appeal of homogeneously grouped classes, and 17% used the phrases *not challenged*, or *not challenging*, *or unstimulated* when telling why heterogeneous classes did not appeal to them.

Responses from the gifted cohort related to pace were only slightly less frequent than those concerning ability or achievement levels. Of the 46% referring to pace when discussing the lack of appeal of heterogeneously grouped classes, numerous students used such words as *slower*,

held back, *wait,* and *wait for the others*. Similarly, of the 63% who mentioned pace when discussing the appeal of homogeneously grouped classes, more than half used phrases such as *not too slow*, *not bored*, *not held back*, *faster*, and *don't have to wait* in their answer. Often, responses related to motivation also mentioned achievement or achievement level. For instance, Bill wrote, "The classes [homogeneously grouped] also offer a challenge on my level."

And Bruce said, "It also appeals to me because working with a group of the same ability will help to challenge me as a student."

Michael made a comment suggesting that being challenged individually was not his sole focus; he also wanted to be a member of a challenged group that was moving forward in the curriculum and excelling—together. He said, "I like homogeneously grouped classes because I have the opportunity to excel with rest of the class and not be held back."

These responses demonstrate that overall, in homogeneously grouped classes, the majority of eighth-grade gifted middle school children in this study perceived that they were more challenged, were able to move more quickly through the curriculum at a pace that was right for them, or in the words of Bill at "a pace which suits my needs." In contrast, nearly half of the same students perceived their progress through course work in heterogeneously grouped classes to be slow, or moving "SLOWLY," as Ben put it. Several complained of boredom, and they expressed concern that they were not learning or achieving as they should or could. Said Azariah, "They [heterogeneously grouped classes] don't appeal to me because it is unfair to Challenge kids not to be challenged on their own level…."

These young participants based their perceptions on their own experience in the Laurel Falls School System (a pseudonym), a real school system in a basically small but growing city in the Appalachian Mountain region of the Eastern United States. They wrote their responses in 1990. Within only a few years, the Challenge program that they were in, in homogeneously grouped academic classes, was dismantled and replaced by heterogeneous grouping for all middle grade students. Although some students in the newly detracked middle school were taught

algebra in a heterogeneous team consisting of roughly 100-120 students divided among four teachers, the preparation and experience level of each team's math teacher to teach algebra varied widely. Teaching on one team was the teacher who had, in prior years, taught algebra to all gifted math students. Two years before detracking was completed, she had been honored as one of 50 teachers in the country to receive a Presidential Award for Excellence in Mathematics; her aging counterpart who "hadn't taught Algebra in years" was on another.

For several years after the dismantling of the Challenge Program, no organized special services were provided for gifted children at Laurel Falls Middle School other than what each individual teacher devised for them within the regular classroom setting.

Since the latter 1990s, the school system has been using the pull-out model to serve middle grade gifted students. These classes generally meet one class period per day. The curriculum of the class has varied from year to year along with those who have taught it. Although certified in special education, none of these teachers have had significant training in gifted education. This briefly describes the short history of efforts toward detracking at Laurel Falls Middle School.

An interesting study of detracking elsewhere was published recently. In recounting unintended consequences of detracking policies that have occurred in Japan since 1970, Kariya and Rosenbaum (1999) recorded the history of detracking in public high schools there and studied the consequent "bright flight" to private schools. Unlike within-school tracking as it is usually done in U.S. schools, tracking in Japan is done by grouping students of differing abilities into separate schools. According to the authors, throughout most of the 47 prefectures, "prewar [WWII] and before 1970, public high schools were better than private high schools (Aso, 1965)" (Introduction, ¶ 2). Before the war, all high-achieving students, regardless of their economic status, could attend the best tracked high schools. In the late 1960s and early 1970s, however, detracking began in some prefectures but not in others. At the time, high schools had been differentiated by rank with as many as 8-16 levels in a given district, but after that, ranks in

reformed prefectures were reduced to only a few. Because admission to universities in Japan is determined totally by academic achievement, Kariya and Rosenbaum (1999) were able to use percentages of admissions from public versus private high schools to Japan's most selective universities as a means of gauging which high schools, public or private, were attracting top students. Stated the authors,

> Before the reforms, few private high schools were among the best high schools in the nation. In 1960, among the top 20 high schools in number of graduates admitted to University of Tokyo, only 2 were private schools. The rest were 16 public (prefecture) high schools and 2 national high schools. By 1965, the number of private high schools in the top 20 increased to 5, and to 7 by 1970 and 1975, and then to 12 in 1981. By 1993, 15 of the top 20 high schools were private (Kariya, 1995). Thus, among the nation's high schools, private high schools came to have increasingly strong students, and public high schools had a decreasing portion of the top university slots in the nation since 1960, during the period when these schools were implementing detracking reforms. (Kariya & Rosenbaum, 1999, Our Indicator of School Achievement Outcomes section, ¶ 3)

Also, these authors noted an ironic result in detracked prefectures. Although detracking reform reduced inequalities among high schools, prefectures creating the most equitable high schools ended up, in an effort to stem bright flight, implementing the most internal tracking, similar to tracking in the United States. Furthermore, Kariya and Rosenbaum (1999) noted that wealthier students gained greater and greater educational advantage over those who could not afford private school, and they pointed out that the unintended consequences of detracking are not easily reversed.

Friends, Peer Relationships, and Social Variety

Many of the gifted respondents, whether talking about homogeneous or heterogeneous class groupings, brought up friendships, peers, or peer relationships, leaving no doubt that making

friends, seeing friends, and interacting with others was important to them. For example, when discussing why heterogeneously grouped classes appealed to them, 49% of the gifted cohort listed as reasons being able to meet new people, see other friends, or experience greater social variety. Two students, Boone and Scarlet, specified that the appeal had to do with meeting or seeing others of other ability levels. Boone said, "This type of class lets you meet other people at other learning levels than you."

And Scarlet wrote, "The only thing that I like [in heterogeneously grouped classes] is that I have some friends in other classes that aren't on the same level intellectually."

The rest, however, generally acknowledged the appeal of social variety in heterogeneously grouped classes with comments such as Michelle's, when she said, "You can meet many other new people and be in classes with other friends who aren't in the rest of your classes."

Similarly, Sigourney responded with, "I can see other people & find out what they're doing."

And K.T. said, "…there is a different variety of people in there."

Three other students were more specific, relating that learning from others whose talents differed from theirs or learning about others was a reason heterogeneously grouped classes appealed to them. Warren said, You can get to know different types of people and how they feel."

Selene said, "These classes appeal to me because I am different than everyone else and I have the chance to be mixed with people who have different talents that I can learn from."

And Sigourney commented, "You can learn more about people by talking to different kinds of people."

Both the strong interest many of the gifted eighth-graders displayed in their peers who were not in their academic classes and their recognition of the value of friendships with their nongifted peers and the importance of understanding "how they feel" contradict a common

characterization of the gifted as being haughty, deprecating, or elitist toward their nongifted peers (Hastings, 1992; Oakes & Lipton, 1990). Overall, when describing the appeal of heterogeneously grouped classes, the comments the gifted made about peers were positive. In fact, at least 93% of the gifted cohort said little in response to question B-4 that could be construed as condescending toward other classmates with different ability levels.

It was only later, when telling why mixed-ability grouped classes did not appeal to them that gifted students made negative comments about peers (34%) and clarified why they made them. Some of the gifted cohorts' responses indicated that they felt insecure, frustrated, or uncomfortable with some of their peers in mixed-ability classes, others pointed to what they considered unkind or unacceptable behavior of some peers in those classes, and others mentioned having difficulty excelling because of peers' behaviors. For instance, Sigourney related hesitancy about peers when she said, "At first, there are some people in heterogeneously grouped [classes] that you just don't feel comfortable with."

And some of the boys gave examples of being picked on or, as Stanton said, "treated like dirt."

Boone, one of the smaller boys, revealed, "Some people will pick on others because they are bigger and stronger or not as smart."

The negative impact of lack of motivation among peers was another reason given for why heterogeneously grouped classes did not appeal to the gifted students. Both Selene and Rory, respectively, talked about peers in those classes who "don't have any drive and encourage you not to learn," or who "don't care about school."

And finally, the most passionate response concerning peers came from John, whose frustration was evident when he said, "I hate, with a passion, heterogeneously [grouped] classes because they are very frustrating for the kids in Challenge classes. The kids in the below average classes make it <u>very</u> [triple underlined] hard to excel."

Most of the negative responses that the gifted children offered about their peers in heterogeneously grouped classes related to issues that all children rightfully raise when others in the group are unkind or prevent them from learning. Far from exhibiting elitism, many of these gifted children were apparently quite interested in meeting and nurturing friendships with other students in heterogeneously grouped classes, but they were not interested in interacting with bullies or those who prevented them from excelling.

Making More "Connections" With Peers in Homogeneously Grouped Classes

The gifted children in this study indicated the importance of friendships and peer relationships in their homogeneously grouped classes as well. In fact, behind reasons related to being able to work at their own ability level and a pace appropriate for them, friendships and issues about peer relationships were the third most frequently cited reasons given for why homogeneously grouped classes appealed to members of the gifted cohort.

Yet a unique aspect of friendship and peer relationships emerged in responses about homogeneously grouped classes that was much less frequently mentioned in discussion of friendships and peer relationships in heterogeneously grouped classes. It was that gifted eighth-graders recognized and described specific connections between themselves and their like-ability classmates in their homogeneously grouped classes that they rarely discussed when describing friendships and peer relationships in heterogeneously grouped classes. Rather than merely discussing being with or seeing friends or peers in homogeneously grouped classes, responses often included a second part, an explanation of the relationship or connection that the student had with friends or peers in their homogeneously grouped classes. Over 40% of the gifted cohort made comments about connecting or communicating with other gifted peers in a meaningful way. These connections were subdivided into categories of friendship connections, social or emotional connections, and intellectual connections.

Friendship Connections Among Homogeneously Grouped Peers

Seven of the 17 (41%) students who mentioned connections referred to "better friendships" or "closer friends" or said things like "most of my friends are in there," "most of my friends are usually grouped with me," or "most of my friends are in the same class as me." John expounded on the connection he made with like-ability friends when he said, "Since you make most of your friends by likes and dislikes, you are most likely [in a homogeneously grouped class to be] in the class with your friends."

Social or Emotional Connections Among Homogeneously Grouped Peers

Seven other students also discussed different types of social or emotional connections when explaining why homogeneously grouped classes appealed to them. Michelle and Stanton, for instance, both expressed the benefit of having a common bond: "It is easier to get along with your classmates. Everyone has something in common," said Michelle, and Stanton concurred when he said, "…many people in these classes have the same interests as you."

Two boys and one girl used the terms *relate* or *relate to* in their answers when describing the importance of having others in class "who have the same problems" or "understand" their problems or were people with whom they could "have better discussions." Mason said,

"Homogeneously grouped classes appeal to me because many of my friends are in with me, almost everyone has the same abilities, I can relate to the other students, and most people have the same problems."

And Richie's response was similar: "When you have problems, the other students are more likely to understand than those with different abilities."

Likewise, Alexandra said she could "learn more, have better discussions, [and] have people [I] could relate too [sic]" in homogeneously grouped classes.

Intellectual Connections With Peers in Homogeneously Grouped Classes

The final type of connection evident in the gifted cohort's responses when offering reasons why homogeneously grouped classes appealed to them was intellectual connections. Three students discussed intellectual connections: one who was highly gifted, one who had experienced the enjoyment of teaching her academically able peers math during practice periods for an upcoming math contest, and one who was also particularly academically able who noted learning from his like-ability classmates. Their comments follow. Warren said, "You get to know people on the same "wave length" [his quotation marks] that understand you."

Megan said, "The other students that don't understand the information can relate to me."

And Lee wrote, "You can learn from other students."

All of the connections that the gifted cohort mentioned in describing interactions with other gifted peers suggest an interdependent and synergistic quality in the relationships that they share. By definition the academically gifted are a smaller group within the normal population of students, scoring at the high end of academic and achievement measures. Consequently, their opportunities to learn from, relate to, or truly understand one another—to connect with those thinking and sometimes feeling at the same level they do—are statistically less than for any other group, particularly in heterogeneous settings. Yet to these gifted students, the importance of connecting with others like them appears to be great. Administrators should afford highly academically able students opportunities to make these connections often so that they, like their nongifted peers, can grow socially, emotionally, and intellectually through meaningful interactions with those with whom they can relate.

Other Valid Yet Less Frequently Discussed Responses and Emergent Categories

In other responses to questions B-3 through B-6, students discussed pressures that they felt to resist unfair stereotypes other students might apply to them; to continuously "do better than everyone else;" or many times, for the sake of parents or teachers, to just do more, when abilities

in classes were different. Also, some discussed pressure to keep up academically in homogeneously grouped classes.

Name-calling was another issue. Students did not like to have names such as *brainy* or *nerd* applied to them, no matter what class they were in. And finally, only a few students mentioned teachers when describing the appeal or lack thereof in their mixed or like-ability classes. Two students pointed out that teachers' time was split between ability levels in heterogeneously grouped classes, and one stated that "teachers don't seem to care as much" in mixed ability classes.

A Paradigm Shift—In Identifying the Gifted

A major theme in the writing of antitracking proponents such as Oakes (1985) and Wheelock (1992) is that tracked schools foster inequality. Results from the present study indicate that, though gifted services provided by the Laurel Falls school system addressed the needs of 41 children participating in this study, minority students were indeed underrepresented in this group of eighth-grade gifted students. In Chapter 3, where demographic information as well as school records were analyzed along with data from *Questionnaire A* to determine the racial mix as well as who was being served in the Laurel Falls eighth grade gifted program, how long they had been participating in gifted services, what school they came from, and what the programming was like, some of the results emerging from the data were encouraging and others were discouraging.

Encouraging was the fact that the Laurel Falls school system and its gifted program, grown from the original vision of a young teacher who essentially built the system's gifted program from the ground up and eventually became the first gifted coordinator, has since 1982 provided various services to address the needs of the gifted in both the elementary and secondary schools. In looking at Table 3.6 and Table 3.7 in Chapter 3, one can see that many of the students in this study were highly involved in gifted programming and have likely benefited from their experience. Over 70% of the gifted cohort had been enrolled in various programs since the fourth

grade, and almost a third of the children had been receiving services for the gifted since kindergarten.

In the elementary years, these gifted students had, for the most part, been in pull-out programs, but some had also been placed in accelerated or enriched groupings either with other classmates in their own regular class (within-class groupings) or with other like-ability students from other classes (between-class groupings). These students were grouped for acceleration, differentiation, and elaboration in many areas, including art, computers, English, math, problem solving, reading science, social studies, and writing.

When they matriculated on to sixth grade at the middle school, 83% were enrolled in Challenge classes where curriculum was tailored to meet the needs of gifted children. By seventh grade, 98% of the gifted cohort were enrolled in gifted programming delivered in homogeneously grouped settings, and then, of course, all of the gifted children in this study were served in homogeneously grouped academic classes that were enriched and accelerated to challenge highly academically able children.

A discouraging result emerging from *Questionnaire A* data was that, according to demographic data from the school system, U.S. census data, as well as data from this study, of the students who were identified as gifted by the school system, in the eighth grade in 1990, and placed on the two teams selected to offer Challenge classes for the gifted, none were Black, and aside from those of Middle Eastern descent, none represented the minority populations in the surrounding community of approximately 6% Black and about 1% American Indians, Eskimos or Aleuts, Asians or Pacific Islanders, Hispanics, or "Other" combined. In short, minority students were missing from the program.

Also, yet more disturbing was the information represented in Table 3.8, a pie chart signifying elementary feeder schools from which the children in the gifted cohort hailed. In the chart, the distribution of the identified gifted was uneven, suggesting that out of nine schools, two elementary schools plus private schools were responsible for producing more than two-thirds of

the gifted children who were eventually served in the eighth grade at the sole middle school, Laurel Falls Middle. Additionally, none of the eighth-grade gifted children in this study came from three of the elementary schools in the system. Essentially, the majority of the gifted cohort came from elementary schools located in more affluent and predominately white neighborhoods.

Fortunately, much has changed for the better since 1990. In a recent discussion with the special education director for the Lauren Falls school system, we talked about new state guidelines for screening and identification and changes in requirements for documentation of services and students participating in gifted programs. I also have a copy of the system's local plan for serving the gifted which was approved by the state department of education in March, 2002.

In recounting how these many changes in identifying and serving the gifted have come about, the director explained that in the 1999-2000 school year, new options for identification were added in an effort to identify more intellectually gifted children from traditionally underrepresented populations. Additionally, in the next school year and the year after, 2000-2001 and 2001-2002, thoroughly revised new state criteria for identification were developed and fine-tuned over the two-year period to make identification a much more inclusive rather than exclusive process, especially for minority children.

Locally, while implementing new identification criteria, new screening methods and procedures were also developed to find eligible students earlier. Instead of screening in third and fifth grade, initial screening is now done in second grade, and any child can be referred for screening at any time. Also, greater effort has been made to make parents in all school communities more aware of the concept of giftedness in general and of gifted services available to eligible children attending the city schools. Through after-school meetings, newspaper announcements, and pamphlets sent home with students, parents are now better informed about gifted programs, screening and identification procedures, and ways that they or others can refer their child for screening.

Finally, for each child screened, referred, evaluated, and receiving gifted services, documentation is recorded. Now, at the end of each year, the Laurel Falls school system as well as other systems in the state, submit data about minority students versus nonminority students screened, evaluated, and found eligible. Systems also report the number of minority versus non-minority students enrolled system-wide. This data over the coming years should offer state and local overseers of gifted services a much more detailed assessment of progress made or not made in the identification of all gifted children, and particularly minority gifted children.

In an article discussing improvement of identification of talent potential among minority and disadvantaged students, Frasier and Passow (1996) listed several populations that are often missed. In addition to those underrepresented according to race, they also include those under-identified and underserved because of language differences (such as children for whom English is a second language), those of low socioeconomic status (such as children who qualify for free or reduced lunch); and those who live in specific geographic areas (such as children who live in rural areas, the inner city, barrios, or on reservations).

Frasier and Passow (1996) also generated several ideas to guide improvement in the search for potential in underserved populations. The first was to recognize that our understanding of giftedness is becoming broader as we move away from a unidimensional conception of giftedness toward viewing "the phenomenon as complex, multifaceted, multidimensional, and nurtured in particular social and psychological contexts" (p. 199) and thus allows for conceptions of giftedness beyond high intelligence or academic aptitude. But this does not mean that academic achievement is unimportant, for formal education, often including postsecondary and graduate education, is considered crucial in modern societies, and specialized talents are valued. Consequently, the nurturing of "schoolhouse giftedness" (p.199) remains essential.

Second, Frasier and Passow (1996) stressed the importance of recognizing the effects of culture and sociocultural context on talent potential and development. Where schools are racially imbalanced, have poorer facilities, larger classes, fewer resources, fewer programs for the gifted

or other factors contributing to unequal educational opportunities, these factors and their affective impact must be taken into account. Also, when reviewing assessment procedures, educators should seek the input of various minority groups "to examine the concept of giftedness within their own cultural and environmental contexts and provide the basis for recognizing talents, without apologies for differences, where these exist, in their expression and performance" (p. 200). Understanding of how giftedness is conceived in particular subcultures can only be gained through the insight of members of those subcultures.

Although Frasier and Passow (1994) underscored awareness of cultural differences and environmental contexts that affect minority and economically disadvantaged children, they also warned that watering down identification criteria or standards or formulating constructs of giftedness solely for specific populations or seeking different areas of talent in specific populations—differing from those sought among the population at large—does not resolve problems in identifying underserved children and nurturing their talent. Rather, they proposed that new paradigms for identifying talent must be constructed that include broader, multidimensional conceptions of giftedness combined with more varied and authentic assessment; that encourage the realization that attributes and specific behaviors or manifestations of giftedness are culturally dependent; and that make provision for the disadvantaged gifted to be identified while learning so that they may demonstrate unusual potential while participating in rich learning activities especially designed to expose them to challenging teaching that they might not otherwise experience.

When testing for identification of minority and low SES children for placement in gifted programs, some scholars have recommended that test administrators pay particular attention to recognized testing bias and also be aware that children from impoverished backgrounds particularly require tests that place less reliance on verbal performance than on performance in other areas. Also, if possible, schools should provide such children who are possible candidates for gifted programs with language enrichment to offset verbal deficiencies. Such a program

would doubtless benefit all students, but would be especially important to low SES children (Tyler-Wood & Carri, 1993).

When I asked the director of special programs whether or not she felt progress was being made as a result of the new guidelines and identification options implemented, that include a broader conception of giftedness as well as account for the cultural context of underserved minority or low SES children, she replied that she would characterize efforts so far as both a success and a qualified failure. "Here," she said, "we have all had to expand our understanding of both giftedness and the gifted. That we have done this is, in and of itself, a success. Also, by screening earlier and identifying more eligible children earlier, those children are able to receive services and participate in programming earlier and longer." On the other hand, she described local and state efforts as a qualified failure because "in these first years of implementation, although we are identifying more children eligible for services, we are still not finding enough from underserved populations." When asked why she thought this was so, she explained that conceptions of giftedness were new, criteria for referral and testing were new, and the paperwork required to document the entire process was different and more detailed. Still, she remained optimistic, suggesting that that with time, after everyone involved in the process becomes more knowledgeable and comfortable with new requirement and procedures, the numbers of the potentially gifted and talented identified and served will rise.

Gifted Eighth-Graders Distinguish Between Grouping Structures and General Ability Levels

The group of 41 gifted children who were observed and who responded to questionnaires in this study, as well as the subgroup of four who were interviewed, demonstrated from the first that they understood the differences between homogeneous and heterogeneous groups. In responses to questions on *Questionnaire B,* where they were asked to first name their homogeneously grouped classes and then their heterogeneously grouped classes, they listed with 100% accuracy each of their classes and identified the grouping structure for the class. They also,

without assistance, deftly applied the terms to an anomalous situation where some of the advanced choir students were grouped together—according to vocal talent—in an exploratory class that was otherwise, for other choir students, heterogeneously grouped. Important to note about the gifted cohort being able to accurately assess the grouping structures of their classes is that to do so, these twelve and thirteen-year-old students had to have a sense of who was working at their own ability level and who was not, or in short, be able to discern the general skill levels of their peers.

Eighth-graders' capacity, or at least these eighth-graders', to discriminate between general ability levels of their peers combined with their tendency as an age group toward both self-consciousness and brutal honesty (Wiles & Bondi, 1986; Fenwick, 1987) should be considered when developing grouping structures for them. Whether grouped to diminish ability differences or not, older middle school children will inevitably assess how their own abilities stack up against those of their peers, and talk about it. Therefore, if older middle school children are both aware of the general academic levels or abilities or strengths and weaknesses of their peers—as well as their own—and are more open, vocal, and honest about them, then it follows that program builders seeking effective approaches for addressing different ability levels and accompanying needs among older middle school children should capitalize on these characteristics and incorporate them into the program design.

A Paradigm Shift—In Structuring Schools

Two possible ways among many that school program builders can approach the discriminatory ability and heightened critical capacity of the eighth grader as exhibited by the gifted cohort in this study are (a) It can be left unaddressed by creating a school culture that attempts to diminish academic differences or levels by placing all students including the academically talented in mixed ability classrooms, or (b) It can be positively exploited by creating a school culture that seeks, acknowledges, and values multiple intelligences (Gardner,

1983) or talents and accompanying varying stages of talent development that children have reached (Bloom, 1985; Whitehead, 1929), honestly and without apology. In such a situation, students could self-select to participate in course levels most appropriate to their needs and goals in different talent areas.

As Cremin (1989) pointed out, the clientele of schools today are vastly different from schools pre-World War II. Due to the popularism of schooling, no longer are only academically able students staying in school and pursuing a high school diploma. Rather, the overwhelming influx of students in American schools and colleges since World War II has created a larger, more heterogeneous group of schoolchildren who have numerous and valuable talents, but who are not all academically talented.

When creating a school culture that acknowledges multiple intelligences and recognizes that individuals will naturally be at different stages of talent development in various areas, a paradigm shift would be required of teachers and administrators as well as students and their parents. Adults who grew up in an era when success in school meant straight A's in academic classes, and where art, music, drama, and technical programs were only provided if there was extra money in the budget, would have to rethink the definition of school and reevaluate the meaning of success for individual children. Such a school culture, however, would value nonacademic and academic talent equally, would encourage students to pursue their interests and focus on their strengths while learning with those of similar ability and would encourage them to do the same when working to improve weaknesses.

In a study conducted by Stroud (2002) of middle school principals' decision-making processes concerning ability grouping, 20 principals were interviewed and shared their views on homogeneous versus heterogeneous grouping in their schools. In discussing how students perceived being grouped for instruction, some gave examples of students referring to themselves as the "dummy group" (p. 97). Other principals who were using homogeneous grouping said that they encouraged teachers to talk with students when these comment were made to explain that

placements were made in students' best interests to maximize their achievement. Interviewed principals who considered like-ability grouping successful in their schools also commented that they had developed a positive, matter-of-fact school climate of "this is how we do things here" (p. 97). A major point of agreement among principals who used homogeneous grouping (85%)was that it is imperative that groups remain flexible to allow students to move between groups.

Additionally, Catholic schools appear to have set an admirable example in creating appropriate and nurturing homogeneous environments, and particularly those that engage lower ability learners. The positive school climate created among three tracked Catholic high schools reported in a qualitative study conducted by Vali (1986) was attributed in part to teachers of lower track students being especially committed to student achievement. In a follow-up study, Vali (1990) also reported that not only did curriculum in lower tracks parallel that of higher tracks, but also more experienced teachers were assigned positions teaching lower-level students as well. More studies investigating schools and classrooms where lower-level students experience positive results in classes grouped by ability will contribute to our understanding of best practices in educating them, as will new research on struggling students learning successfully in classes that are heterogeneously grouped.

Considerations and Concerns About Detracking

In addition to more thoroughly researching tracked and untracked schools in which all groups progress and succeed, educators deciding how to structure schools should also consider possible problems or unintended consequences that can occur when schools do away with tracking. Perhaps the greatest concern resulting from detracking at Laurel Falls Middle School was that preparation and planning for meeting the needs of the gifted and other special populations in the regular classroom did not occur either before or after the school was restructured. Because they were in classes grouped according to ability, the gifted students in this study benefited from well-designed and articulated gifted programming throughout their school

careers. Their younger highly able counterparts attending the same school only a few years later, however, were placed in heterogeneously grouped classes with teachers who taught as they had in the past and received no training in differentiating instruction and no training in teaching either special needs students or the gifted. Furthermore, researchers have found that it is common practice in this country for gifted students in the regular classroom to be provided nearly the same curriculum and instruction offered average ability students, with teachers making only minor modifications to meet the needs of the gifted (Archambault, Westberg, Brown, Hallmark, Zhang, & Emmons, 1992).

According to a National Middle School Association research summary on heterogeneous grouping, "staff development is critical with training in open-ended projects, compacting curriculum, performance-based assessments, differentiated assignments and grading standards..." (¶ 2). More important than whether or not students are homogeneously or heterogeneously grouped, said Kulik (1982), is that instruction is tailored to the achievement levels of the students. If school policy makers choose to detrack, they must first have a complete, long-term plan in place that includes assessment of the appropriateness of curricula, and provides for teacher training in strategies for meeting the needs of all ability levels in the regular classroom. All changes in policy and procedure should be regularly evaluated and adjusted accordingly.

Another concern cited repeatedly by gifted participants when responding to item B-6 of *Questionnaire B* about the lack of appeal of heterogeneously grouped classes was they thought they would not be challenged at their ability level or learn what they should or could learn in these classes (56%), and they feared the pace of instruction would be too slow (46%). In her book on differentiating learning for all students, Tomlinson (1999) stressed the importance of challenging students appropriately. Citing the work of several scholars on this topic, she said that people learn best with moderate challenge:

> A task is appropriately challenging when it asks learners to risk a leap into the unknown, but they know enough to get started and have additional support for reaching a

> new level of understanding. Put another way, students who consistently fail lose their motivation to learn. Students who succeed too easily also lose their motivation to learn. For learning to continue, students must believe that hard work is required, but the hard work often pays off with success. Teachers also must remember that what is moderately challenging today won't offer the same challenge tomorrow. Challenges must grow as students grow in their learning. (1999, p. 19)

Educators and parents want to insure that all children will be presented with tasks that are appropriately challenging, that they will all succeed more than they fail, and that they will all continue to be motivated to learn. But can we be sure that detracking is the answer in pursuing this goal? And can we be sure that in detracking we are not sacrificing the educational progress of the academically gifted for the prospective educational gains of their peers? Surely there is more than one workable solution to this dilemma. Perhaps it involves new and creative ways of thinking about school, school success, intelligence, and talent.

A Paradigm Shift—In Defining School and School Success

I put stock in what my students think and perceive about their own experience, no matter what their ability level. Unlike adults who have, over the years, become encumbered in a sense by too much input—too much theory, philosophy, politics—eighth grade children becoming aware of the full extent of their critical faculties have a candidness or, if you will, a purity of viewpoint that is unique and refreshing. I hope that in the future we as a society will enlist the help and input of this age group more often. As it stands, we waste a valuable resource.

Over the course of this study, I found myself reflecting on a particular idea more than once as I observed both the identified gifted and their peers, read the gifted cohort's responses, and considered the literature describing the middle schooler in general and, specifically, the gifted middle school child. This idea had to do with the antithetical nature of the general public's perception of what middle schools are and the true nature of the middle school child. Often, the

middle school is viewed by the greater community as a type of waiting area, a holding tank of sorts, for children on their way to the high school where scores count, where concrete plans for the future are drawn, and where everyone from educators to parents to the students themselves, get much more serious about future plans and academic performance.

The irony in all of this that I, who have spent a good number of my waking hours working with over 1500 middle school children in my career, see, is that if anyone in our society should not be waiting or be placed in a holding pattern, it is the older middle school child. And if they are cooling their heels rather than steadily progressing in an area in which they demonstrate or want to demonstrate talent—it is particularly unfortunate.

These young people have boundless energy, enthusiasm, curiosity and overall, given the opportunity to participate in experiences related to their own talents, interests and goals, are eager to learn, be useful, and contribute their "expertise" where it might be appreciated. They want to work with adults who are doing something that they, the students, value—something that is important to them. So why do we wait until 9th grade to get serious about articulating goals, and why do we write four-year plans? Many, many middle school children are aware of their talents or strengths in the sixth grade, and if they aren't, with some help, they probably could be. Instead of the four-year plan outlining high school course work for grades 9-12, we should be writing flexible seven-year plans for our students. By the beginning of sixth grade, school personnel and each individual child should have some sense of his or her strengths so that maximizing these can be the focus of his or her plan. As it stands, school records generally reflect only academic strengths. What about nonacademic strengths? More information would obviously be required. And, of course, plenty of latitude would have to be built into individualized plans to allow for adjustments as children mature and encounter new interests or move beyond past interests. But each child should know why and how his or her coursework will be of benefit in progressing toward goals that he or she understands.

To accomplish this, school systems must first embrace more recent theories of intelligence that acknowledge musical, social-emotional intelligence, spatial or artistic, and bodily-kinesthetic intelligences as well as the linguistic and logical-mathematical intelligences that are normally recognized in schools. And Gardner's (1983) multiple intelligence theory is just one intelligence theory worthy of investigation and consideration. There are others (e.g. Guilford, 1977; Sternberg, 1999; Taylor, 1978).

I am aware that more skeptical or fiscally minded educators will say this is not possible, that school systems do not have the programs, personnel, or money to assess each child's talents and design an appropriate seven-year plan for each child to maximize and develop his or her strengths. I can hear, "It can't be done!" Yet this thinking is one reason sound educators on both sides of an issue such as tracking have continued to debate for so long. We must as a society be willing to take greater risks and think more creatively about schooling for middle schoolers in order to align what we (and this includes the teachers who teach them every day and the children themselves) know about middle school children and their needs and abilities, with what we do for them and with them in school.

To help middle school children assess their strengths and interests either in sixth grade or at the beginning of each middle school grade, changes in procedure may need to occur. Those children might have to begin school a week or even two weeks later than everyone else to allow school personnel to meet individually with children and parents. True the children might miss two weeks of classes, but how often does a middle school child have the simultaneous undivided attention of two or more adults whose purpose is to help them plan for their future based on their identified strengths, talents, and interests? Which, the missed classes or the personal planning session, would the child remember most? What is the "it" we are trying to help the child make?

As Loveless (1998) asserted, each school system in each community must make decisions about school policy based on the needs of the students and the culture of the community

they serve. But policy makers need not be pressured into or restricted to single solutions, such as those proposed by antitracking proponents, to solve school problems and develop appropriate learning experiences designed to meet the needs of all of the children in the community. Rather than focus solely on an option that clearly, in the eyes of gifted students experiencing school first-hand in this study, can restrict their growth and talent development, they should instead consider the efficacy of homogeneous class grouping for some populations—such as the gifted—and, under the appropriate circumstances, not rule out the same for other ability levels—particularly when curriculum is tailored to the ability level of the class (Valli, 1990).

Furthermore, disenfranchised or underachieving students in the schools require immediate attention. If they are there, and don't know why, and think their teachers and administrators don't care, then we have failed, and we need to act—but not react. Instead of counting on other better-behaving or better-performing children to model what these young adolescents "should be" as students, the truly more compassionate and what I believe to be the ultimately more rewarding approach is to value what they "are," build on that, and help them see that they and their unique talents are important. From there, educators can then work with them to help them in the areas that they and their parents want to improve upon. And for highly motivated students, "step-up" programs such as after-school, summer, or Saturday classes or activities should be offered so that if they truly want to pursue a particular talent and catch up to their age-mates, they may pursue their goals.

Educators building and influencing individual school cultures must through their actions encourage children to acknowledge and value all talents of their peers—and support each gift and talent with equal vigor. At the same time, educators must encourage children to recognize that, while each person has gifts, they may not always excel in everything. But if all strengths are considered valuable, and the focus of the school is on nurturing strengths rather than ameliorating weaknesses, then students at different places in different areas of talent development can honestly acknowledge just that—being at a different place in a particular skill, discipline, or talent. We all

are—at different places in our growth and development. It is nothing to hide or be ashamed of, if adults and students create a culture of appreciation of growth and achievement at the highest possible levels in many areas of talent development for all.

Suggestions for Additional Research

The focus of this research was gifted students' perceptions of how grouping affects their achievement, motivation, peer interaction, and self-esteem. It would be interesting to ask nongifted students the same questions. Also, this research was conducted in 1990 when Laurel Falls Middle School was in the process of detracking. Students participating in this study are now out of college or in graduate school and may have children of their own. Because the school has now been detracked for several years, and gifted students have been heterogeneously grouped while in middle school, current eighth-graders' responses to questions asked of the gifted in 1990 may be different. Finally, educators are experimenting with many different types of grouping arrangements in schools. For instance, some schools are now grouped according to gender, race, or religion, to name a few. These also are controversial grouping structures that require a "costs vs. benefits" analysis. The research design and instruments created for this study could be useful in developing a study of students' perceptions of the effects of these grouping structures on their own achievement, motivation, peer-interaction and self-esteem.

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APPENDICES

QUESTIONNAIRE A

Discussing Personal Background and Grouping
With Team C and D Students

Lisa R. Swor, Dissertation Research Project
30 March 1990

Directions: I am happy that you are interested in participating in this research project. Your opinions and observations about the grouping of middle school students will be carefully considered and will influence the outcome (final report) of this research. Consequently, I ask that you take your time and respond thoughtfully to these questions. Please have confidence in your own views. I want to know what you think. Others are entitled to their opinions, but your thoughts are what are of interest to me here.

Real Name _____ Pseudonym_____

1. Have you lived in Laurel Falls all of your life? If not, where did you live before moving to Laurel Falls?

2. Which elementary school(s) and middle school (s) have you attended?

School	Grade Levels	City	Grouping
	Kindergarten		
	1st Grade		
	2nd Grade		
	3rd Grade		
	4th Grade		
	5th Grade		
	6th Grade		
	7th Grade		
	8th Grade		

3. When you were in elementary school and 6th, 7th, and 8th grade, were you grouped

A. mostly with other gifted or bright kids (homogeneously)

B. with kids of different abilities (heterogeneously)

Please mark A or B under the heading Grouping to designate how classes were grouped for that particular year.

4. If you were grouped heterogeneously, did you participate in any programs for gifted children such as a pullout program (were you leave your regular classroom and get together to work with other gifted kids) or some other kind of program such as acceleration (where you are given different books to move ahead in a certain subject at a quicker pace) or after-school programs such as Odyssey of the Mind? Please describe these below.

Grade	Class	Describe the type of program if any?
Kindergarten		
1st Grade		
2nd Grade		
3rd Grade		
4th Grade		
5th Grade		
6th Grade		
7th Grade		
8th Grade		

5. Were you in class with many of the same people year after year? (Check the correct column.)

Grade	Same People	Different People
Kindergarten		
1st Grade		
2nd Grade		
3rd Grade		
4th Grade		
5th Grade		
6th Grade		
7th Grade		
8th Grade		

6. If you were in class with the same people much of the time, what would you say are some of the positive aspects of being grouped that way?

7. What were the negative aspects of being grouped with the same people much of the time?

QUESTIONNAIRE B

Discussing Homogeneously Grouped Classes
And Heterogeneously Grouped Classes
With Students in Team C
and Students in Team D

Lisa R. Swor, Dissertation Research Project
6 April 1990

Directions: Students! Thank you for your thoughtful responses on the last group of questions. Here are more specific questions about the classes you have this year as an eighth grader. Please continue to use complete sentences to describe your thoughts and opinions. We are usually most articulate when we put our ideas into sentence form. Please take a few minutes to express your ideas and reactions to the following questions.

1. Which of your classes are grouped homogeneously (with students of similar or "like" abilities) this year? (Name them.)

2. Which of your classes are grouped heterogeneously (with students with different levels of ability) this year?

3. Give as many reasons as you can telling why homogeneously grouped classes appeal to you.

4. Give as many reasons as you can telling why heterogeneously grouped classes appeal to you.

5. Give as many reasons as you can telling why homogeneously grouped classes don't appeal to you.

6. Give as many reasons as you can telling why heterogeneously grouped classes don't appeal to you.