1992

A search for common beliefs and goals: Homogeneous grouping of the intellectually gifted in the middle school

Sara J. Youngkin
University of Northern Iowa

A search for common beliefs and goals: Homogeneous grouping of the intellectually gifted in the middle school

Abstract

The early adolescent years, from 10-14, are a period of immense social, emotional, and physical change. Middle level educators, therefore, believe that schools must adjust and provide a different structure for these early adolescents. This belief manifests itself in the middle school concept, and this concept has grown into an organized movement as traditional junior high schools transform into middle schools. In fact, George (1988) reports that in the United States more than half of the school systems are currently following the middle school concept by adopting an appropriate middle school program.

A Search for Common Beliefs and Goals: Homogeneous Grouping of the Intellectually Gifted in the Middle School

A Graduate Project
Submitted to the
Department of Curriculum and Instruction
in Partial Fulfillment
of the Requirements for the Degree
Masters of Arts in Education
UNIVERSITY OF NORTHERN IOWA

by
Sara J. Youngkin

July 1992

This Research Paper by: Sara J. Youngkin

Entitled: A Search for Common Beliefs and Goals: Homogeneous Grouping of the Intellectually Gifted in the Middle School

has been approved as meeting the research paper requirement for the Degree of Master of Arts in Education.

July 13, 1992	William Waack
Date Approved	Director of Research Paper
July 13, 1992	William Waack
Date Approved	Graduate Faculty Adviser
July 13, 1992	Marvin Heller
Date Approved	Graduate Faculty Reader
July 15, 1992	Peggy Ishler
Date Approved	Head, Department of Curriculum and Instruction

TABLE OF CONTENTS

A Search for Common Beliefs and Goals: Homogeneous Grouping of the Intellectually Gifted in the Middle School

The early adolescent years, from 10-14, are a period of immense social, emotional, and physical change. Middle level educators, therefore, believe that schools must adjust and provide a different structure for these early adolescents. This belief manifests itself in the middle school concept, and this concept has grown into an organized movement as traditional junior high schools transform into middle schools. In fact, George (1988) reports that in the United States more than half of the school systems are currently following the middle school concept by adopting an appropriate middle school program.

This appropriate middle school program includes the following components: (a) a strong affective component, usually organized in an advisor-advisee format; (b) teams of teachers and students organized to foster a sense of belonging; (c) a focus on interdisciplinary content; (d) a curriculum that emphasizes exploration; and (e) a schedule characterized by flexibility and block scheduling (Alexander & George, 1981). However, national reports

calling for educational reform (Carnegie Council on Adolescent Development, 1989; the National Governors' Association, 1990), resolutions of the National Middle School Association (1989), and recent professional literature (George, 1988; Lounsbury, 1988; Toepfer, 1990) add yet another component to middle level education: a movement away from homogeneous grouping and toward heterogeneous grouping. This movement poses the possibility of the elimination of gifted programming as it is recognized today. As Beane (1990) so succinctly stated in his discussion of reforms in middle school curriculum: "Arrangements such as gifted and talented and remedial classes would be eliminated" (p. 5). Thus it is this added component of middle school philosophy that concerns many leaders in the field of gifted education and appears to be a potential area of confrontation. Experts in the field of gifted education believe that ability grouping should be an option available in gifted programs (Feldhusen, 1989; Gallagher, 1991; Renzulli & Reis, 1991; Van Tassel-Baska, 1991).

Statement of Purpose

It was the purpose of this study to review the current literature on ability grouping in the fields

of gifted and middle level education. As a part of this investigation, the writer examined the topic of middle level and gifted beliefs as they pertain to grouping practices. In addition, the writer investigated the research that is used to support grouping practices. Finally, the literature was reviewed in order to answer the following question: Are there common beliefs and goals shared by the fields of gifted and middle level education that support homogeneous grouping of gifted students within a middle school program?

Limitations of the Study

This study was limited to a review of the literature that was published from 1981-1992 because the issue of tracking and its corresponding effect on homogeneous grouping has come to the forefront of education during that time period. The review was also limited to a discussion of intellectual giftedness as it pertains to gifted programming for the early adolescent.

Beliefs About Grouping

Ability grouping allows a teacher to structure class activities for one level rather than trying to provide for many levels in one class. It is,

therefore, said to exemplify an efficient means for meeting the academic needs of a diverse school population. However, the current research in middle level education seems to indicate that many middle level educators (George, 1988; Oakes, 1986; Toepfer, 1990) and professional organizations and foundations (National Middle School Association, 1989; Carnegie Foundation, 1987) have targeted such grouping practices for elimination.

Middle Level Beliefs

Some major scholars in the field of middle level education (George, 1988; Lounsbury, 1988; Toepfer, 1990) believe that ability grouping is antithetical to the middle school philosophy and goals. In a true middle school (in programming, as well as name), the total development of the child is stressed. Toepfer states that this involves paying attention to the emotional and personal-social development rather than just the cognitive or intellectual dimension. According to Lounsbury and George, while there are several elements that make up the complete middle school program, the goal of meeting the developmental needs of the early adolescent can be enhanced through the practice of heterogeneous grouping rather than

through homogeneous grouping. Indeed, heterogeneous grouping provides an opportunity for middle level educators to accommodate the social and emotional needs of the early adolescent and to provide positive influences in those areas (George; Oakes, 1986).

Heterogeneous grouping.

Current literature in middle level education reveals a strong belief in the positive effects of heterogeneous grouping. These positive effects include the mixing of students from varied backgrounds and a corresponding acceptance of those backgrounds. In addition, heterogeneous grouping allows an interaction among students that results in positive role models and increased self-esteem.

According to George (1988) a positive result of heterogeneous grouping is the interaction and acceptance among students of diverse backgrounds. Heterogeneously grouped classes produce a microcosm of society (Lounsbury, 1988) where students of varied racial, ethnic, and economic backgrounds are grouped together. This grouping constitutes an environment which approximates American society. A positive effect results. When students of such varied backgrounds are placed together, they can be taught to work

together and accept others as they must do in a democratic society (Oakes, 1986).

In addition to improved acceptance of diverse backgrounds, George (1988) offers other positive results of heterogeneous grouping. There is improved student self-esteem because none is singled out as being of lesser ability. In addition, heterogeneous grouping allows students of higher ability to serve as positive role models for lower ability students by displaying a pro-school attitude and providing positive leadership.

While the positive consequences of heterogeneous grouping are clearly summarized by George, perhaps it is easier to understand supporters of heterogeneous grouping if the negative outcomes of homogeneous grouping are examined.

Homogeneous grouping.

The literature presents six negative outcomes of homogeneous grouping. These are (a) a segregation of students racially and socially, (b) lowered expectations for students and teachers in low-ability classes, (c) a negative attitude toward school for low-track students, (d) lowered self-esteem, and (e) the creation of an undemocratic situation (Johnston, Markle, Arth, Tonack, & Roh, 1992).

A closer examination of these negative outcomes reveals middle level educators' arguments against homogeneous grouping. Tracking by ability tends to divide ability groups racially and perpetuates the concept of a classed society (Braddock & McPartland, 1990; George, 1988; Lounsbury, 1988; Oakes, 1986). Oakes states that minority and poor students are almost always overrepresented in low tracks and, conversely, are underrepresented in the higher tracks. While multiple identification procedures are suggested as one means of eliminating this problem, Oakes concludes that these procedures do not work: "These differences in placement by race and social class appear regardless of whether test scores, counselor and teacher recommendations, or student and parent choices are used as the basis for placement" (p. 14).

Research indicates that the existence of lowered expectations for students and teachers is another negative outcome of homogeneous grouping (George, 1988; Oakes, 1986; Toepfer, 1990), According to George, there often is a school-wide attitude that students in the lower track are not capable of high academic work. Teachers of lower tracks often incorporate this attitude into their expectations for their students

and correspondingly alter their actions. For example, the pace of learning is slowed, and fewer demands are placed on students (Braddock & McPartland, 1990; George). The end result of these actions may be that students' achievement levels are further reduced, thus reinforcing the teacher's expectations that these students are correctly placed in the lower track.

George (1988) and Oakes (1986) believe that lowered teacher-expectations affect a student's self-esteem and attitude toward school. Both researchers suggest that low-ability-grouped students seem to internalize negative teacher-expectations. This results in poor self-images, a lower confidence in abilities, lower achievement, and a negative attitude toward school. This negative attitude manifests itself in classroom performance, as well as in actions in other areas of school.

Middle level literature presents a final negative outcome of homogeneous grouping: It is clearly undemocratic. Homogeneous grouping seems to deny minority and poor students the opportunity to be a part of high-ability groups (Oakes, 1986; Slavin, 1987; Toepfer, 1990). This is caused by the lack of flexibility usually found in grouping practices.

George (1988) and Oakes (1986) believe that ability grouping allows students to be tracked into particular, rigidly fixed groups that deny the low-ability students the opportunity to qualify and shift to other tracks. Toepfer believes this undemocratic quality has important long-term social and educational consequences, denying students the knowledge that would enable them to move successfully into higher academic classes and acting as a method of defining friends and social status.

To summarize, the middle level literature on ability grouping seems to indicate that heterogeneous grouping is the preferred grouping practice. The positive effects of heterogeneous grouping are pointed out by such middle level leaders as George, Oakes, and Lounsbury. Heterogeneous grouping provides an interaction among students with diverse backgrounds. It also provides low-ability students with an opportunity to improve self-esteem and to be influenced by high-ability students acting as role models.

Heterogeneous grouping is also advocated because of the negative consequences of homogeneous grouping. Homogeneous grouping may perpetuate a division of classes. In addition, ability grouping often divides

students along racial or ethnic lines. Finally, students in low-ability tracks receive a lower quality of instruction and curriculum that subsequently is perpetuated through lower teacher-expectations and inflexibility in regrouping practices. From these statements it seems clear that opponents of homogeneous grouping believe that ability grouping is undemocratic in its selection processes and treatment of students, curricularly and instructionally, and should not be a part of middle level school's educational program.

Gifted Education Beliefs

"The current trend that will undoubtedly result in dragging down achievement throughout the entire country is ... (that of) ... eliminating most forms of grouping" (Renzulli & Reis, 1991, p. 31). This statement by two eminent scholars seems to epitomize the concern that experts in the field of gifted education have expressed about the reform movement and its effect upon grouping practices. Gallagher (1991), another scholar in the field, believes that the trend toward heterogeneous grouping in the middle school is a major concern for gifted education.

Heterogeneous grouping.

This review of the current literature in the

field of gifted education shows two areas of concern regarding heterogeneous grouping. Leaders in gifted education question whether the academic potential of the intellectually gifted student can be attained in a heterogeneous classroom. In addition, heterogeneous grouping appears to have negative social and emotional consequences for the intellectually gifted student.

The intellectually gifted student possesses an advanced level of knowledge far beyond what is usually taught in the regular classroom. According to Gallagher (1985), intellectually gifted students are often from two to three years ahead of their age-peers. Feldhusen (1989) and Renzulli and Reis (1991) provide evidence of this. They found in their field tests of curriculum compacting at the middle level that it was not unusual for intellectually gifted learners to have 50% of their curriculum eliminated. Feldhusen found a similar percentage of students who had knowledge of algebraic concepts that are usually taught in the regular curriculum. Thus, intellectually gifted learners often become bored in school, and full potential may not be reached.

The wide range of abilities found in a heterogeneous classroom often prevents the teacher

from meeting the academic needs of the students. Sicola (1990) states that it would not be unusual to have six grade levels in one middle level class. It would be difficult for teachers to instruct such classes. To compensate, teachers often adjust instruction and time to provide for the needs of the slower learner (Benbow, 1991). This is evidenced by Renzulli and Reis (1991) when personal correspondence from a teacher with 10 years of experience and a graduate degree in education of the the gifted is related:

> My frustration at not being able to adequately challenge the gifted students in my heterogeneous classroom grows each year. With 28 students of varying levels and abilities and special needs, I often find the most neglected are the brightest. Even though I know what to do for these youngsters, I simply do not have the time to provide the differentiated instruction they need and deserve. Instead, my attention shifts, as it has in the past, to the students in my class with special learning problems who are already terribly behind (p. 33).

Adequately meeting the academic needs of the

intellectually gifted is difficult in a heterogeneous classroom (Gallagher, 1991). Middle school programs that adhere to heterogeneous grouping may delay the academic development of the intellectually gifted student.

Heterogeneous grouping also appears to have negative social and emotional consequences for the intellectually gifted student. Feldhusen (1989) believes that intellectually gifted students are often ostracized by students of lower ability because they do their homework, receive high grades on tests and projects, and are often the ones who ask and answer questions. In a middle school setting, at a time when early adolescents are concerned about being different, the intellectually gifted students often hide their giftedness in order to be accepted and avoid ridicule (Coleman & Cross, 1988). Feldhusen, Sciola (1990), and Coleman and Cross conclude, therefore, that the affective needs of gifted students are not adequately met in heterogeneous groups. The failure to do so often leads to isolation, social frustration, poor social skills, and discrimination by peers (Davis & Rimm, 1985).

Homogeneous grouping.

Experts in gifted education point out the positive effects of homogeneous grouping for gifted students. These positive effects include the development of potential through curriculum modifications and through grouping of students with similar interests and abilities.

Maker (1982), Feldhusen (1991), and Gallagher (1985) state that the intellectually gifted students require modifications in instruction that include abstract concepts, advanced content, and complex processes. These curriculum modifications can best be accomplished with homogeneous grouping (Feldhusen). In addition, teachers can better adapt instruction to correspond to gifted students' abilities (Kulik, 1991). Homogeneous grouping allows the intellectually gifted students to reach their potential more fully (Feldhusen, 1989; Gallagher, 1991; Mills & Durden, 1992).

Another positive effect of homogeneous grouping for intellectually gifted students lies in the affective domain. Homogeneous grouping allows gifted students to be with peers who share similar interests and abilities, peers who accept them as they are

(Feldhusen, 1991; Van Tassel-Baska, 1989). Clark (1988) believes that intellectually gifted students, when grouped with peers of similar ability and interest, are not tempted to hide their giftedness in order to be accepted. Their conceptions of self-worth are reinforced and self-esteem rises.

In summary, the discussion on ability grouping practices found in the literature of gifted education points out the negative and positive effects of ability grouping. The literature reveals that the negative effects of homogeneous grouping and the positive effects of homogeneous grouping center on meeting the academic, social, and emotional needs of the students.

Heterogeneous grouping does not allow the academic potential of the intellectually gifted student to be fulfilled. Those students often have knowledge of 50% of the regular curriculum and usually spend class time reviewing what they already know. In addition, in a mixed ability class the literature shows that instruction is often paced for lower ability students.

The social and emotional needs of intellectually gifted students are not adequately met in the heterogeneous classroom. The intellectually gifted student is often ostracized for positive attitudes

toward school and scholastic performance. This often results in the intellectually gifted students limiting their performance.

It is clear, then, that leaders in gifted education support homogeneous grouping. They feel that intellectually gifted students can better fulfill their academic potential in homogeneously grouped classes.

The literature also provides confirmation that necessary curriculum modifications for gifted students can best be achieved in a homogeneous group. Teachers can more easily adapt curriculum and instruction to fast-paced, advanced, and more complex and abstract levels.

By grouping intellectually gifted students homogeneously, the social and emotional needs of those students are better met. Shared interests and abilities and acceptance by peers allows the intellectually gifted students to feel comfortable with their giftedness and to reach their full potential.

Supporting Research

Current professional literature in the fields of middle level and gifted education strongly indicates

opposing beliefs about grouping practices. Furthermore, it makes clear the fact that each field supports its beliefs through research. The two most prominent research reviews on grouping practices in the current literature are the meta-analyses of James Kulik and Chen-Lin Kulik (1982, 1987) and Robert Slavin's best-evidence syntheses (1987, 1990a). The best evidence synthesis by Karen Rogers (1991) is the most recent analysis of research on grouping practices. In addition to these research reviews, the field research of Jeanne Oakes is often cited in the literature. Because of the bodies of conflicting research present in the current literature, it seems appropriate to summarize the research of these individuals so that one can better understand the differing points of view of each field of education.

Gifted Education

The review of the literature shows that the belief in homogeneous grouping for the intellectually gifted student is strongly based on the research of the Kuliks. Their studies of between-class grouping and within-class grouping were analyzed as they pertained to effects on achievement, attitudes toward subjects and school, and self-esteem.

In summarizing their findings on the effect of ability grouping on achievement (1990), Kulik and Kulik found that there were significant effects on achievement in between-class grouping. In 25 studies that reported "controlled evaluations of programs that provided separate classes for gifted students" (p. 188), 19 showed that students achieved more when taught in homogeneously grouped classes. Kulik and Kulik concluded that in 11 of the 15 studies, the difference in achievement of intellectually gifted students taught in homogeneous classrooms versus those taught in heterogeneous classrooms was great enough to be considered statistically significant. "Each of these 11 studies favored homogeneous grouping" (p. 188).

Kulik and Kulik (1990) also reported on their analysis of 15 studies that considered within-class grouping for intellectually gifted students. Nine of these studies showed a positive effect on achievement. They therefore concluded that there was a higher overall achievement level for students grouped within classes for instruction.

In the review of their research, Kulik and Kulik also summarized the results of the effects of ability grouping on self-esteem and attitudes toward subject

and school (1990). They found the effect on self-esteem to be near zero. Two conclusions were drawn. First, the gifted may become slightly less satisfied with themselves when taught with intellectual peers. Second, the lower ability students may gain slightly in self-confidence. Kulik and Kulik also concluded that 4 of the 6 studies analyzed on attitudes toward subject and school showed a trivial positive effect.

Kulik and Kulik (1990) summarized their meta-analysis of studies on grouping for the intellectually gifted student as follows:

> The evidence is clear that high-aptitude and gifted students benefit academically from programs that provide separate instruction for them. Academic benefits are positive but small when the grouping is done as a part of a broader program for students of all abilities. Benefits are positive and moderate in size in programs that are specially designed for gifted students. Academic benefits are striking and large in programs of acceleration for gifted students (p. 191).

The recent review of research by Rogers (1991) appears to corroborate the conclusions of Kulik and

Kulik. Rogers differentiates her findings for two types of programs found in homogeneous grouping for gifted students: enrichment and acceleration.

According to Rogers (1991), research allows five conclusions about ability grouping for enrichment. First, full-time ability grouping produces substantial gains for gifted and talented students, while it produces no discernible difference in the academic achievement of average and low-ability students. Second, there are academic gains in achievement, critical thinking, and creativity for gifted students. Third, grouping for enrichment has little impact on the self-esteem of gifted students. Fourth, there is moderate improvement for all ability levels when students are grouped homogeneously on a full-time basis. Finally, ability grouping is not synonymous with tracking.

Rogers (1991) then presents two conclusions that can be made from her analysis of studies on grouping for acceleration. First, acceleration produces substantial academic gains. Second, acceleration does not appear to have a direct impact on self-esteem.

To summarize, the positive convictions about homogeneous grouping as expressed by leaders in gifted

education are primarily based on the research of Kulik and Kulik (1982; 1987) and the more recent research of Rogers (1991). The three researchers found achievement levels of the gifted to be positively affected by homogeneous grouping. Rogers further concluded that both acceleration and enrichment produces substantial academic gains and that enrichment positively affects critical thinking and creativity for the gifted and talented student. Neither Rogers nor Kulik and Kulik found homogeneous grouping to impact self-esteem.

Middle Level Education

The review of the literature indicates that most leaders in middle level education primarily support their beliefs about grouping practices with the work of Robert Slavin and Jeanne Oakes. Their studies on the effects of ability grouping on achievement and self-esteem provide evidence that supports heterogeneous grouping.

Slavin (1990a) reviewed available research that evaluated the effects of ability grouping on the achievment of high-, average-, and low-achieving students in secondary schools. As a result of his review, Slavin concluded that achievement differences

between high-achievers in homogeneously grouped classes and those in heterogeneously grouped classes were not statistically significant for high achievers.

Slavin's work further showed that ability-grouped students in the lower level may suffer from lowered self-esteem (Johnston, et al., 1991). Slavin (1990b) therefore concludes, "If ability-grouped class assignments produces few if any learning benefits, (and) is detrimental to self-esteem ... then its continued use can hardly be recommended" (p. 495).

In her work, Oakes (1986) examined the effects of tracking on instructional quality and social development of students. She concluded that there are no benefits in achievement for students in the top track, and that those students in the lower tracks lose academic ground, self-esteem, and enthusiasm for school.

Criticisms of Slavin's and Oakes' Research

The current literature reveals that both gifted and middle level education support their opposing beliefs about grouping practices through the supporting research bases just reviewed. The research of Slavin and Oakes has been used by middle level educators as valid evidence that ability grouping

should be eliminated and replaced by heterogeneous grouping. The research of Rogers (1991) and Kulik and Kulik (1982; 1987), as well as Feldhusen (1991), Gallagher (1991), Renzulli and Reis (1991), and Van Tassel-Baska (1991) among others, is used to support the premise that strict adherence to heterogeneous grouping may well bring about the demise of special programming for the intellectually gifted student. Because of their expressed concerns, researchers in the field of gifted education have begun to investigate the research of Slavin and Oakes. Their investigations have produced the following conclusion: The research used to support heterogeneous grouping is flawed.

Slavin's research has been severely criticized by scholars in gifted education (Allan, 1991; Gallagher, 1991; Kulik, 1991; Mills & Durden, 1992; Rogers, 1991). The three common criticisms of Slavin's work are (a) the use of standardized tests as the main measure of achievement (Allan; Rogers), (b) the omission of gifted programs in the research review (Allan; Mills & Durden), and (c) the inclusion of groups of high-ability without changes in curriculum, content level, or pacing (Allan; Gallagher; Kulik). Rogers adds a fourth criticism: "The studies included are primarily from the 1950s and

1960s and may not be generally applicable to the classrooms of the 1990s" (p. 15).

Slavin's dependence upon standardized tests to assess the degree of achievement gained by high-ability groups is criticized by researchers in the field of gifted education for several reasons. First, according to Rogers (1991), there is no documentation that the tests used by Slavin's research actually measured what was taught. In addition, Rogers, Mills and Durden (1992), and Allan (1991) state that the ceiling effect inherent in the standardized tests used in Slavin's studies limits the measurement of performance of those students who routinely score in the top percentiles of standardized tests. Rogers summarizes this effect: "... no difference in achievement might be the conclusion drawn about gifted students who were ability grouped if they and their equally gifted controls had both scored at the ceiling of the criterion measure used to assess differences in achievement" (p. 3). By using achievement tests to evaluate the achievement level of high-ability students, invalid results were produced (Allan, 1991). These invalid results were then used by Slavin to evaluate the effectivensss of homogeneous grouping.

Gallagher (1991), Mills and Durden (1992), Kulik (1991), and Allan (1991) note a second criticism of Slavin's review on grouping: He omitted special programs for gifted students in his review of grouping outcomes. Gifted programs which allowed for curriculum acceleration and advanced instruction were excluded on the basis that they involve changes in curriculum, goals, and instructional strategies, thus making them different from other grouping plans. Mills and Durden reason that this is the very reason these programs should have been included: Ability grouping allows such changes to be implemented.

A final criticism of Slavin's research concerns his inclusion of studies that make comparisons between heterogeneous and homogeneous grouping. These studies included homogeneous and heterogeneous groupings within a traditional classroom without changes in curriculum content level or pacing (Mills & Durden, 1992; Rogers, 1991). Mills and Durden contend that by comparing achievement gained in a traditional classroom with "lock-step grade-restricted curriculum and teacher controlled pace of instruction" (p. 13), Slavin is placing a ceiling on learning for the highest ability students.

Current professional literature concerning the validity of studies on ability grouping also presents criticism of Oakes' research. Most recently, Karen Rogers (1991), in her research synthesis on grouping practices, challenges Oakes' work. She refers to Oakes' 1985 study as being a relatively small, poorly designed study of only 25 junior and senior high schools. Additionally, Rogers asserts that Oakes' conclusions were based upon research conducted eight years previously, thus adding to the questions of validity. Kulik and Kulik (1990) state that Oakes' work is based on "subjective reviews and informal analyses of the literature on grouping" (p. 191). Furthermore, the Kuliks contend that Oakes bases her conclusions on an "idiosyncratic review of other reviews" (p. 191). Perhaps Feldhusen (1991) summarizes the thoughts of experts in the field of gifted education when he states: "In no way do (the) results (of Oakes' research) lead to a conclusion that ability grouping should be eliminated" (p. 66).

To summarize, the review of the current literature indicates that the research of Slavin and Oakes is frequently used to support the conclusions of opponents of homogeneous grouping. Experts in the field of

gifted education, however, have analyzed the research and discovered apparent flaws in that research.

First of all, the research of Slavin is criticized for his use of standardized tests to assess the degree of achievement for students in high-ability groups. The ceiling effect of the standardized tests used by Slavin may have caused an inaccurate measure of achievement. Another apparent flaw in Slavin's research is his exclusion of special programs for the gifted. Yet, there are indications that this research may, on occasion, have been used to eliminate programs for the gifted because it shows that ability grouping does not produce significant achievement (Feldhusen, 1989). Finally, research indicates that Slavin compares achievement outcomes between homogeneous and heterogeneous grouping within a traditional classroom where no modifications of content level or pacing were made.

The work of Oakes is criticized for its inaccurate research and corresponding inaccurate conclusions. Her reviews have been challenged by researchers in gifted education as being idiosyncratic and subjective, while her analyses are said to be informal.

A Search for Commonality

The literature reviewed thus far clearly demonstrates the conflict in beliefs that exists between the fields of gifted and middle level education. That conflict, on occasion, has become so heated that Gallagher (1991), in an extension of the metaphor, referred to the conflict's manifesting itself into armies of both sides. Perhaps it is time to examine the conflict and to search for common goals and beliefs that might allow both sides to reduce the conflict. By looking for these common goals and beliefs, an answer may be found to the question of whether middle level education can support homogeneous grouping of the gifted student within the middle level program.

Current literature appears to reveal three common goals that may build a basis for consensus between the fields of gifted and middle level education. They are (a) to meet the needs of students, (b) to improve instruction in the regular classroom, and (c) to provide flexibility in grouping practices and in the selection of group members.

The review of the literature indicates that both fields of education share a common goal of meeting the needs of students. In the field of middle level

education, such scholars as Toepfer (1990), Lounsbury (1988), and Braddock and McPartland (1990) state the importance of meeting the intellectual needs of middle level students through effective learning environments. Similarly, scholars in the field of gifted education such as Clark (1988), Maker (1982), Gallagher (1985), and Van Tassel-Baska (1989) advocate defensible programming that responds to the academic needs of the gifted. Both fields of education, then, appear to stress the importance of meeting the academic needs of the students.

An apparent second common goal of middle level and gifted education is revealed through the literature: to improve instruction in the regular classroom. A problem long inherent in rigid ability grouping has been that instruction in the low-ability classes has been poor (Arth, Bergman, Clark, Johnston, Lounsbury, & Toepfer, 1989; George, 1988; Oakes, 1985). Leaders in the field of gifted education, Renzulli and Reis (1991), Feldhusen (1991), Rogers (1991), and Treffinger (1991) acknowledge this fact and call for the improvement of instruction in general education. This might be accomplished by encouraging educators of the gifted to share their technology and to offer

alternatives in instructional methods within the regular classroom.

Finally, a goal common to both middle level and gifted education appears to be to provide more flexibility in grouping practices and in the selection of group members. Scholars in both fields (Benbow, 1991; Braddock and McPartland, 1990; Sicola, 1990; Van Tassel-Baska, 1991) and the NASSP's Council on Middle Level Education in Middle Level Education's Responsibility for Intellectual Development (Arth, et al., 1989) advocate the use of several criteria in group selection processes. The Council on Middle Level Education suggests that teacher input, previous performance in a subject area, and evaluations of readiness to perform at advanced levels should be considered in placement decisions. Similarly, leaders in gifted education advocate a multi-dimensional approach to the selection process. This process should include equitable procedures that guarantee each student who might benefit from the placement is not overlooked (Benbow, Feldhusen, 1989; Renzulli & Reis, 1985). To increase flexibility in grouping practices, Benbow and Renzulli and Reis state that students should be allowed to rotate into gifted

programs. Thus, it has been found in the literature that improvement of flexibility in grouping practices and in the selection of group members is a common goal of both gifted and middle level education.

It is clear that current literature demonstrates common goals of middle level and gifted education. In addition, middle level literature also reveals a support of ability grouping that is not often noted. For example, some middle level scholars support the existence of exceptions to their advocacy of heterogeneous grouping (Braddock & McPartland, 1990; George, 1988; Slavin, 1990b). In addition, the National Governor's Task Force on Education (1990) and the NASSP's Council on Middle Level Education (1989) concede the need for special programs for the gifted and for some forms of grouping.

The National Governors' Task Force on Education (1990) has been cited as calling for the elimination of tracking; indeed, one of its stated goals is to eliminate ability grouping and tracking. The Task Force also states, however, that eliminating these practices does not require ending special opportunities for gifted and talented students (Renzulli & Reis, 1991).

The NASSP's Council on Middle Level Education (Arth, et al., 1989) declares that homogeneous grouping may be an option in order to meet the diverse needs of students:

> The fundamental purpose of grouping learners should be to place them in settings that best meet their needs. For gaining many types of experiences, heterogeneous groups present more natural and likelike situations. In others, homogeneous groupings may have some advantages. Neither completely heterogeneous nor homogeneous approaches deal responsibly with the developmental variance among young adolescents. (p. 15).

The literature further reveals that George (1988), Braddock and McPartland (1990), and Slavin (1990b) also give credence to ability grouping for the intellectually gifted. George states the necessity for interdisciplinary teams in the middle school. These teams would allow students the opportunity to see themselves as important parts of varied groups. When students are a part of a team, George believes, it may be possible to regroup students between classes on a team without damaging the opportunities for increased self-esteem and more positive group involvement.

"This regrouping should be restricted to classes where the hierarchical nature of the subject most appropriately requires it. Social studies, science, exploratories, and physical education must remain untracked wherever possible" (p. 28).

Finally, Slavin (1990b) states that students have a right to reach their full potential, including the gifted. He states:

> I would certainly be opposed to any plan that would hold back gifted children from achieving as much as they are able to accomplish as long as efforts are made to ensure that all children achieve to their full potential (p. 7).

Slavin further justifies programs for the gifted when those programs are in the form of acceleration and have a different curriculum, one that would be inappropriate for average- or low-ability students.

In summary, the literature shows that gifted and middle level education share three common goals: (a) to meet the needs of students, (b) to improve instruction in the regular classroom, and (c) to provide flexibility in grouping practices and in selection of group members. In addition, middle level literature reveals support for homogeneous grouping of special

students. The National Governors' Task Force, the Council on Middle Level Education, and such advocates of heterogeneity as George and Slavin state the need for special programming for the gifted and for some forms of ability grouping.

Summary, Conclusions, and Recommendations

Summary of Reviewed Literature

The purpose of this study of current literature was to investigate middle level and gifted beliefs as they pertain to grouping practices. In addition, the major research that is used to support grouping decisions was examined. Finally, the current literature was reviewed to determine if gifted and middle level education share any common beliefs and goals that would support homogeneous grouping of gifted students within a middle school program.

The literature revealed middle level educators' beliefs about ability grouping. They maintain that the school years of early adolescence are better spent stressing the social and emotional needs of adolescents rather than stressing the academic needs. To accomplish this, middle level educators believe heterogeneous grouping is the better grouping practice. In support of this belief, middle level educators

point to the positive effects of heterogeneous grouping and the negative effects of homogeneous grouping.

The middle level literature also indicated three significant positive effects of heterogeneous grouping. These are (a) the interaction among students with diverse backgrounds, (b) the improvement of self-esteem for low-ability students, and (c) the positive influence gifted students provide (George, 1988; Lounsbury, 1988; Oakes 1986).

The reviewer also found commonly stated negative effects of homogeneous grouping discussed by experts in the field of middle level education (Braddock & McPartland, 1990; George, 1988; Johnston, et al., 1992; Lounsbury, 1988; Oakes, 1986; Toepfer, 1990). Three are most often discussed. First homogeneous grouping perpetuates a division of classes. Second, homogeneous grouping usually divides students along racial or ethnic lines. Finally, when students are grouped homogeneously, those of lower ability receive poorer instruction and less vigorous curriculum. This is caused and perpetuated by lower teacher-expectations and inflexible grouping decisions. The overriding

result of these negative effects is the creation of an undemocratic environment.

Gifted education research indicated that intellectually gifted students are adversely affected by heterogeneous grouping. The curriculum and instruction are lowered to correspond with the knowledge and capabilities of lower ability students. In addition, the literature revealed that intellectually gifted students are often ostracized for displaying their abilities. To compensate, gifted students often hide their giftedness. This in turn causes them to fail to reach their full potential.

On the other hand, gifted education research found homogeneous grouping to be advantageous for the intellectually gifted students. For example, in a homogeneous class, intellectually gifted students were found to be able to reach their full potential because teachers had the time and incentive to match curriculum and instruction with the students' abilities.

A second purpose of this study was to examine the research used by both gifted and middle level educators to support their beliefs about ability grouping. Thus, this writer reviewed the research of Kulik and Kulik, Rogers, Slavin, and Oakes.

An analysis of the literature showed that leaders in gifted education tend to support their beliefs about grouping practices with the research of Kulik and Kulik. Rogers' research synthesis, which concurred with the findings of Kulik and Kulik, added further support of grouping practices.

Kulik and Kulik's research indicated that homogeneous grouping produces a positive effect on the achievement of intellectually gifted students. In addition, the effects of ability grouping on attitudes toward subject and school are positive, but not significant. Similar results were found when the effects of ability grouping on self-esteem were analyzed.

The best evidence synthesis by Karen Rogers supports homogeneous grouping for intellectually gifted students. Rogers concluded that both grouping for enrichment and for acceleration positively affect academic achievement. Self-esteem was minimally affected when students were grouped for acceleration and enrichment.

The literature pointed to the work of Robert Slavin and Jeanne Oakes as research findings supporting heterogeneous grouping as advocated by

many middle level educators. Slavin's work indicated that ability grouping has no statistically significant effect on achievement levels. He further concluded that lower ability-grouped students may suffer from lowered self-esteem. Oakes also concluded that there are no benefits in achievement for high-ability students and in fact, a loss of achievement for low-ability students.

The literature revealed major criticisms of both Slavin's and Oakes' work, however, with most actual statements directed toward the findings of Slavin. The concern about the limitations of Slavin's research centered on the quality and accuracy of the research itself. The limitations, according to critics, are three-fold. First is the issue of the research itself. Can the conclusions drawn by Slavin be supported by the studies used in his research? The literature revealed that the answer to this question is no. The use of standardized tests as measurement instruments does not provide a true measurement of achievement because of the ceiling effect inherent in those tests. Second, it is difficult to draw conclusions about the success or failure of gifted programs through Slavin's research. He excluded studies of accelerated and

enriched gifted programs. Finally, when gifted programs were included in later studies, those that involved changes in content and pace were excluded.

A final purpose of this review was to search gifted and middle level literature for common beliefs and goals that would support homogeneous grouping of gifted students within a middle school program. This reviewer found three goals common to both gifted and middle level education: (a) to meet the needs of students, (b) to improve instruction in the regular classroom, and (c) to increase flexibility in grouping and selection.

The literature also revealed statements by middle level educators that allow homogeneous grouping for special students. The National Governors' Task Force (1990) stated that special opportunities for gifted and talented students should not be eliminated. Furthermore, George (1988), Slavin (1990), and the NASSP's Council on Middle Level Education (Arth, et al., 1989) all agreed that homogeneous grouping may have advantages in meeting the needs of students.

Conclusions

The literature in the fields of gifted and middle level education confirm a controversy centered around

grouping practices. Middle level educators state that meeting the social and emotional needs of the early adolescent are of primary importance. This priority is best met through heterogeneous grouping. Experts in gifted education, on the other hand, point out the benefits of homogeneous grouping for the intellectually gifted. These students require differentiated programming that is modified to meet their needs. Experts in gifted education believe that this can best be achieved in homogeneous classes where instruction and curriculum are matched with ability level.

The beliefs of both gifted and middle level education have been clearly stated by both sides. This does nothing, however, to eliminate the controversy. One can conclude, therefore, that experts in both fields must search for ways to end the controversy. Its continuation cannot solve the issue; rather, it is likely to result in doing harm to children.

The reviewer found that the literature emphasized the research of Slavin and Oakes, whose studies are used as supporting evidence that homogeneous grouping has no positive effect upon students. However, some critics feel that their findings, especially those of

Slavin, lack the validity needed to be used as supporting evidence. In spite of this important flaw, the research is used by reformers and school districts to prove the inability of homogeneous grouping to raise the achievement levels of high-ability students and, concurrently, to question the appropriateness of the very existence of gifted programs.

It can be concluded, therefore, that advocates of gifted education must be made aware of the apparent flaws in the published research. With such knowledge, local supporters of gifted education will be able to question the continued use of Slavin's research in determining the existence of ability grouping in gifted programming.

The literature revealed that scholars in middle level and gifted education share some common goals and beliefs. It is important, as the middle school concept continues to grow, that educators of the gifted and talented concentrate on these common elements. Certainly, as Gallagher (1991) and Feldhusen (1991) point out, the rise of the middle school concept could cause the demise of separate gifted programming. It may be concluded, then, that these common elements need to be publicized and reinforced in order to reach

the most significant goal the two fields of education hold: meeting the needs of each student.

In this writer's opinion, the most important conclusion that can be drawn from the literature reviewed concerns the inclusion of homogeneous grouping of gifted students within a middle school program. Middle level literature revealed support for homogeneous grouping of special students in order to meet their diverse needs. One may conclude, therefore, that homogeneous grouping of gifted students can be a part of middle level programming, if that programming is tailored to meet individual needs.

Recommendations

Based upon the review of literature, more studies should be conducted concerning middle level programming and provisions for gifted students. The research on ability grouping that is available is secondary and elementary in nature. The literature revealed a definite lack of research in the area of middle level education. This emphasis on middle level research is necessary because of the rapid development of the middle school concept and its impact upon gifted programming.

To make wiser programming decisions, more qualitative studies are required. Case studies of identified gifted middle school students for whom homogeneous grouping has been provided should be conducted. In addition, case studies of students who are a part of a middle school program that provides for individual differences of all students in heterogeneous groups should be conducted. Such studies would provide more research-based information on homogeneous and heterogeneous grouping practices in the middle school.

A study should also be conducted on achievement levels of identified gifted students participating in various programming structures employed by middle level schools. This would allow researchers to investigate the effects of enrichment and accelerated programs on the academic achievement of gifted students.

In addition to research, ways to bridge the gap between the two fields need to be found. Gallagher (1991) suggests that committees or task forces representing both sides of the controversy be established. This would open lines of communication between middle level education and gifted education. Gallagher also suggests that members of this task

force would then write articles in representative publications of both fields of education. This writer concurs and offers one further thought: cooperation between the two fields must begin. Experts in gifted education need to share their expertise in instruction, programming, and identification of student abilities. Middle level educators and educators of the gifted need to meet with the common purpose of establishing procedures for best meeting the needs of all students. An outcome of this might be the creation of a curriculum that is relevant for each student's needs. Such a curriculum might help educators in both fields of education, gifted and middle level, to become knowledgeable and sensitive to the needs of all students, no matter what their abilities. That is, after all, the goal of each.

References

Alexander, W. M., & George, P. S. (1981). The exemplary middle school. New York: Holt, Rinehart, and Winston.

Allan, S. D. (1991). Ability-grouping research reviews: What do they say about grouping and the gifted? Educational Leadership, 48(6), 60-65.

Arth, A. A., Bergman, S. K., Clark, D., Johnston, J. H., Lounsbury, J. H., & Toepfer, C. F. (1989). Middle level education's responsibility for intellectual development (Report). Reston, VA: National Association of Secondary School Principals.

Braddock, J. H. (1991). Tracking the middle grades: National patterns of grouping for instruction. Phi Delta Kappan, 73, 445-449.

Braddock, J. H., & McPartland, J. M. (1990). Alternatives to tracking. Educational Leadership, 47(4), 76-79.

Beane, J. A. (1990). Rethinking the middle school curriculum. Middle School Journal, 21(5), 1-5.

Benbow, D. P. (1991). When progress on behalf of the gifted is being made everywhere except in my community. Unpublished manuscript.

Carnegie Council on Adolescent Development. (1989). Turning Points. New York: Carnegie Council on Adolescent Development.

Clark, B. (1988). Growing up gifted (3rd ed.). Columbus, OH: Merrill.

Coleman, L., & Cross, T. (1988). Is being gifted a social handicap? Journal for the Education of the Gifted. 11(4), 41-56.

Davis, G., & Rimm, S. (1985). Education of the gifted and talented. Englewood Cliffs, NJ: Prentice-Hall.

Feldhusen, J. F. (1989). Synthesis of research on gifted youth. Educational Leadership, 46(6), 6-11.

Feldhusen, J. F. (1991). Susan Allan sets the record straight: Response to Allan. Educational Leadership, 48(6), 66.

Gallagher, J. J. (1985). Teaching the gifted child (3rd. ed.). Boston: Allyn and Bacon.

Gallagher, J. J. (1991). Educational reform, values, and gifted students. Gifted Child Quarterly, 35(1), 12-19.

George, P. (1988). Tracking and ability grouping: Which way for middle schools? Middle School Journal, 20(1), 21-28.

Johnston, J. H., Markle, G. C., Arth, A. A., Roh, L., Tonack, D., & Trawinski, P. (1992). Gifted and talented: Part II: Programs, Curricula and outcomes. Middle School Journal, 23(4), 53-57.

Kulik, C-L., & Kulik, J. A. (1982). Effects of ability grouping on secondary school students: A meta-analysis of evaluation findings. American Educational Research Journal, 19, 415-428.

Kulik, C-L., & Kulik, J. A. (1987). Effects of ability grouping on students' achievement. Equity and Excellence, 23, 1-2: 22-30.

Kulik, J. A. (1991). Findings on grouping are often distored: Response to Allan. Educational Leadership, 48(6), 27.

Kulik, J. A., & Kulik, C-L. (1990). Ability grouping and gifted students. In N. Colangelo & G. Davis (Eds.), Handbook of gifted education (pp. 178-196). Needham Heights, MA: Allyn and Bacon.

Lounsbury, J. (1988). Middle level social studies: Points to ponder. Social Education, 52, 116-118.

Maker, J. C. (1982). Teaching models in education of the gifted. Austin, TX: Pro-Ed.

Mills, C. J., & Durden, W. G., (1992). Cooperative learning and ability grouping: An issue of choice. Gifted Child Quarterly, 36(1), 11-15.

National Governors' Association. (1990). Education America: state strategies for achieving the national educational goals. Report of the Task Force on Education.

National Middle School Association 1988-89 resolultions. (1989). Middle School Journal, 20(3), 18-20.

Oakes, J. (1986). Keeping track, part I: The policy and practice of curriculum inequality. Phi Delta Kappan, 68, 148-153.

Renzulli, J. S., & Reis, S. M. (1985). The schoolwide enrichment model. Mansfield Center, CT: Creative Learning Press.

Renzulli, J. S., & Reis, S. M. (1991). The reform movement and the quiet crisis in gifted education. Gifted Child Quarterly, 35(1) 26-35.

Rogers, K. B. (1991). The relationship of grouping practices to the education of the gifted and talented learner. University of Connecticut, Storrs, CT: National Research Center on the Gifted and Talented.

Sicola, P. K. (1990). Where do gifted students fit? An examination of middle school philosophy as it relates to ability grouping and the gifted learner. Journal for the Education of the Gifted, 14(1), 37-49.

Slavin, R. E. (1987). Ability grouping and student achievement in elementary school: A best evidence synthesis. Review of Educational Research, 57, 293-336.

Slavin, R. E. (1990a). Achievement effects of ability grouping in secondary schools: A best-evidence synthesis. Review of Educational Research, 60, 471-499.

Slavin, R. E. (1990b). Ability grouping, cooperative learning and the gifted. Journal for the Education of the Gifted, 14(1), 3-8.

Slavin, R. E. (1991). Are cooperative learning and "untracking" harmful to the gifted? Response to Allan. Educational Leadership, 48(6), 68-71.

Toepfer, C. F. (1990). Implementing turning points--major issues to be faced. Middle School Journal, 21(5), 18-21.

Treffinger, D. J. (1991). School reform and education--opportunities and issues. Gifted Child Quarterly, 35(1), 6-11.

Van Tassel-Baska, J. (1989). Appropriate curriculum for gifted learners. Educational Leadership, 46(3), 13-15.

Van Tassel-Baska, J. (1991, Spring). NAGC Curriculum Studies Newsletter. (Available from National Association of Gifted Children, Washington, D.C.

Xenos-Whiston, M., & Leroux, J. A. (1992). Gifted education: Isn't this good for all children? Middle School Journal, 22(4), 36-39.