Grouping the Gifted: Myths and Realities

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The debate over whether to group gifted students with their academic peers has raged for years. A host of myths claiming negative results from grouping gifted students has evolved and been used in attempts to eliminate such groupings. Karen Rogers reviewed a massive amount of research on the topic and presents information to dispel nine of those myths. Her article is a powerful tool for advocates of gifted education.

Few topics in education have aroused as much passion, both positive and negative, as ability grouping. Jeanie Oakes' book, *Keeping Track* (1985), spurred a national movement to eliminate grouping practices for students of all abilities. With her powerful appeals to emotion, she argued that tracking students had led to a system for maintaining inequity for the poor, the culturally diverse, and the less able in America's schools. One principal, reacting to her message, wrote in *Educational Leadership:*

The answer to the debate on ability grouping is not to be found in new research. There exists a body of philosophic absolutes that should include this statement: The ability grouping of students for educational opportunities in a democratic society is ethically unacceptable. . . . It should become a moral imperative along with the beliefs that slavery is immoral and that all people are created equal under the law. (Haistings, 1992, p.14)

Then, too, educational writers such as Paul George and Robert Slavin have tried to argue similarly for the elimination of tracking using a somewhat more reasoned approach. At one point, Slavin stated:

Because of the antiegalitarian nature of ability grouping, the burden of proof must be on those who would claim its effectiveness and indispensability. . . . There is much research still to be done to understand the effects of ability grouping . . . on student achievement, and more important, to study the effects of alternatives to between-class ability grouping. However, we know enough after seventy years of research on the topic to justify moving away from tracking and beginning a search for instructional methods capable of enhancing the achievement of all learners. (Slavin, 1993, p. 549)

Why, then, when you read how reason and emotion appear to agree on the "bad effects" of grouping, am I continuing to write this article? Perhaps it is because this issue is of such great importance to gifted children. Moreover, what the general education writers are arguing accounts only for the perspectives of the poor and the culturally diverse who are not gifted. Or perhaps it is because these writers have misled this country's current crop of teachers and administrators, leading them to believe the inequity, moral reprehensibility, and anti-achievement arguments about grouping, with little actual research or even scholarly study to back up the arguments.

It all comes down to the myths about ability grouping, often arising out of emotional, political, and economic foundations, and the realities—what the actual studies about grouping have found out about academic, social, and psychological effects. For the remainder of this article, I would like to take you on a tour of the research, both past and present, to see where the realities lie. I will use my comprehensive meta-evaluation of the fourteen research syntheses conducted on various forms of grouping published by the National Research Center on the Gifted and Talented in 1991. Added to this will be an update of

all the research on grouping conducted since that time (an additional fifty-six studies).

Myth 1: Homogeneous grouping is not a "picture" of the real world. In our adult lives, particularly in our work and home lives, we must work together in heterogeneous groups almost continuously.

Reality: A National Public Radio broadcast (1995) studied the work patterns of adults in the Los Angeles area, finding that approximately 35 percent of these adults were working from home, with infrequent trips to a centralized location for meetings with others. The reporter viewed this as a picture of the decades to come, whether because of messy transportation issues, the efficacy of technological/electronic transmissions, or the economic efficiency of fewer business centers and buildings to maintain. In fact, it is likely that the twenty-first century will witness much more individual work done without workers coming to a central place to do business. Each will be accountable for his or her own work, which may be added to other workers' tasks. The "group" project by which all sink or swim may be a dying concept.

Furthermore, at no time in this democracy have adults been forced into having their friends chosen for them. We tend to make friends with others who think and act like we do, people with similar occupations and interests (Schunk, 1996). Yes, we must be able to communicate clearly with all echelons of society in order to buy our groceries, shop, have repairs made on our homes, gas up our cars, and make bank transactions, but this skill is not so pervasive nor so difficult to learn to warrant thirteen years of cooperative/heterogeneous group work in preparation.

Myth 2: Grouping is elitist, undemocratic, and racist. Disproportionate numbers of Asians and whites are found in high-ability groups, and other cultures, such as African American and Hispanic, are underrepresented. "Politically powerful" parents of gifted children insist on maintaining these power inequities for their children's "protection."

Reality: Since 1990 and the inception of the Jacob Javits Act, all federal government funds in gifted education have been focused on finding and educating underserved and underrepresented populations of gifted learners. As a part of the evaluation process, projects funded must enumerate underrepresented students

identified and served through the innovative methods undertaken in the grants. In fact, none of these grants has been awarded to any project for which the primary goal was to identify and serve the more "traditional" gifted child.

Furthermore, the majority of projects undertaken involve programs in which gifted children are grouped for instruction. Hence, we can call neither gifted education in general, nor grouping in particular, racist. In fact, the survey studies of numbers of ethnic minorities engaged in grouped programs make the assumption that high-ability groups are formed to separate out the "riff raff" and to maintain the status of the "in group" (Oakes, 1985). Emil Haller (1985), among others, however, has found that group placement is a result of a student's specific and current performance, rather than skin color or economic class. His experiments using student case studies have shown this time and time again, since the mid-1980s. Other factors may be leading educators to under-identify deserving children for gifted grouping opportunities, such as lack of awareness of cultural values that contradict the general notions of giftedness, such as task commitment, desire to achieve, and persistence. This would suggest that major professional development is in order, not that grouping be eliminated.

Myth 3: In schools that use ability grouping, the "good" teachers get the "good" students. The worst teachers are those responsible for low-ability classes.

Reality: The research on effective teachers of the gifted often concludes with a list of personality, experiential, and cognitive characteristics that best match the needs and abilities of gifted students. Often when people outside the field look at this list, they will remark that all students should have teachers like this. But is it true? Look at this list compiled across the work of Clark (1997), Gallagher and Gallagher (1994), and Davis and Rimm (1998) and decide whether these characteristics would be critical to the education of an average child or a child with special needs. Some characteristics, such as training in gifted education, high intellectual ability, expertise in a specific intellectual or talent area, and genuine interest and liking for gifted learners may not be so directly relevant to all learners, but the remainder are.

- extensive training in gifted education

- high degree of intelligence and intellectual honesty

- expertise in a specific intellectual or talent area

- genuine interest in and liking of gifted learners

- recognition of the importance of intellectual development

- strong belief in individual differences and individualization

- highly developed teaching skill and knowledge of how to teach

- self-directed in their own learning, with a love for new, advanced knowledge

- level-headed and emotionally stable

Heath in 1997 canvassed gifted students to find out what they thought made a good teacher. Their list looks like a shopping list for all students, except for "moving through class materials quickly" and "consistent provision of accurate feedback."

- patience

- sense of humor

- moves quickly through learning material

- treats each person as an individual

- doesn't have to be a "sage on the stage" all the time

- consistently gives "accurate" feedback

What is being said here is that there probably is not a single paradigm for the "good" teacher. What makes the teacher of the gifted "good" or "effective" might be highly damaging to a low-level learner and vice versa.

Myth 4: When gifted students are grouped for instruction, this removes the role models at-risk students need to succeed and behave.

Reality: What decades of research on role models has told us, especially the work of Albert Bandura (1964) and Dale Schunk (1996), is that individuals are

most likely to choose a "role model" among those whom they perceive to be at about their own level but experiencing some sort of success (attention, financial rewards, praise, or friendship). A low-level student will not choose a gifted student as a role model because (a) he or she doesn't want to be like the gifted student or (b) he or she doesn't think it's possible to be like that—too much change would be involved.

> Observing peers performing a task increases students' self-efficacy for learning. . . . Peers who readily master skills may help teach skills to observing students, but may not have much impact on the self-efficacy of those students who experience learning difficulties. . . . For the latter, students with learning difficulties who have mastered the skills may be excellent models. (Schunk, 1996, p. 113)

What happens when students are grouped with others of similar abilities and interests is most often a function of who becomes the role model in each classroom. It is just as likely that a charismatic severe underachiever might become the role model for anti-establishment behavior in a gifted class as a discipline problem might become the role model for anti-establishment behavior in a low-ability group. Again, there are factors other than the act of grouping that affect the learning climate in grouped as well as whole grouped or ungrouped classes.

Myth 5: Ability grouping is rigid: once you're in one group level, you can't get out.

Reality: There is a reality to this myth for one kind of grouping—tracking, also known as full-time ability grouping. If children are placed in a low or middle track, what chance would they have to acquire all they are supposed to learn in that track and on the side be picking up all they need to learn in order to be successful in the next highest track? It would be close to impossible for children to move up a track. However, lack of focus, underachievement, disciplinary issues, or a developmental plateau could all lead to children moving down a track. Hence, the permanence or rigidity of tracking seems to be a reality.

But as previous research has pointed out, there are many forms of ability grouping that do not seem to be so inflexible. Performance grouping for specific subject instruction, flexible within-class grouping, cluster grouping, cross-grade grouping, and pull-out groups all rely on students' current levels of performance

and what they already know about what is being taught as the criteria for group placement (Rogers, 1993). Each of these is defensible as a practice, because up-to-date assessment data are used to place children in the groups they "need" to be in for the best focused and appropriately paced and differentiated instruction. For all of these forms of grouping, the gifted have shown substantial academic effects, ranging from approximately one-third of a year's additional achievement to nearly three-fifths of a year's additional growth. For average and lower achieving groups, the academic effects have been smaller but positive. The key with any form of performance grouping, however, is to focus on what is being taught, not on who is being grouped. The studies since 1990 have pointed consistently to the following conclusions about performance grouping (Rogers, 1998):

1. Advanced students benefit academically more than low-ability students (e.g., Berge, 1990; Gamoran, Nystrand, Berends, & LePore, 1995; Goldring, 1990; Hooper, 1992; Richardson & Fergus, 1993).

2. Homogeneous groups are more beneficial academically for all abilities than heterogeneous grouping (Cohen & Lotan, 1995; Hacker & Rowe, 1993; Lou, Abrami, Spence, & Poulsen, 1996; Slate, Jones & Dawson, 1993).

3. Continuous progress alone (i.e., cross grading, mastery learning) makes no academic difference unless it is combined with a variety of instructional approaches (Hall & Cunningham, 1992; Veenman, 1995).

4. Small-group learning is academically more advantageous than whole-group learning (Hallinan, 1994; Jones & Carter, 1994). One study found this not to be true in teaching basic math facts: whole group drill and practice was found superior for retention (Mason & Good, 1993).

5. What is done when students are grouped (i.e., instructional quality, curriculum coverage, instructional time, class size) is more directly related to achievement than just being placed in a group (Kulik, 1992; Pallas, Entwisle, Alexander, & Stluka, 1994).

6. Low-ability students benefit academically when paired with a high-ability student but the converse is not true (Carter & Jones, 1994; Hooper, 1992).

7. Both high- and low-ability students benefit from more social interactions when grouped within a class with like-ability peers (Berge, 1990; Chauvet & Blatchford, 1993; Hacker & Rowe, 1993).

Myth 6: Low-ability students' self-esteem is irreparably damaged when they are placed with other low-ability students.

Reality: This myth was roundly rejected in Kulik and Kulik's multiple meta-analyses of the 1980s and early 1990s. In each synthesis they found that performance on paper and pencil measures of self-esteem was somewhat more positive for low-ability students in grouped classrooms, with a similar pattern also found for average-ability students. The explanations, although not documented at the time, were that these students were less likely to be intimidated by those who answered the teacher's questions more rapidly and were more likely to experience success when the instruction had been tailored to their needed pace and level of complexity.

Self-confidence, an aspect of self-esteem, has been studied in the decade since the Kuliks' work. Both the research teams of Carter and Jones (1994) and Fuligni, Eccles, and Barber (1995) have found that low-ability students tend to acquire more self-confidence in their abilities when in mixed-ability groups. This leaves us with a dilemma: their self-esteem is not damaged when grouped but their self-confidence improves when they are not grouped. Unfortunately, self-esteem is less high (but perhaps more realistic) for high-ability students when they are grouped but their self-confidence only improves when they are given challenges slightly beyond what they think they can do and then they succeed (Hoekman, 1998). This is not likely to happen when gifted students are placed in a mixed-ability group without the challenge and appropriate pacing they require.

> The goal of schools must be to develop the potential of all students as far as possible.

Myth 7: Low-ability and average-ability students' achievement is limited by the groups into which they are placed.

Reality: As pointed out earlier, Slavin's (1993) best evidence synthesis of the research on regrouping by performance level for specific instruction found slight positive gains for low- and average-ability groups when the curriculum itself was appropriately differentiated for these groups. The effects were zero when differentiation could not be documented. Thus, this myth could be true if instruction is not monitored, but it would be wrong to believe that the grouping itself

limits achievement. As the more recent research has shown, smaller groups are superior to bigger groups for overall achievement (Cohen & Lotan, 1995; Lou et al., 1996), and homogeneous groups are superior to heterogeneous groups for overall achievement, class participation, and pro-academic behavior (Hacker & Rowe, 1993; Hooper, 1992).

The goal of schools must be to develop the potential of all students as far as possible. We must never choose an instructional management or delivery strategy that limits any child's potential. It is clear, however, that the act of grouping itself is not limiting. Care must be taken when like-ability grouping is used that the curriculum and the instructional delivery practices are appropriate to the group and aimed slightly beyond what students at that performance level think they are capable of—in Vygotsky's "Zone of Proximal Development"—if we are to make the most of the potential in any group.

Myth 8: Too much time is spent on discipline and behavior modification in low-ability groups.

Reality: The argument here is that low-ability groups become behavioral landmines and that teachers must be disciplinarians first and teachers last. Most interestingly, Jeanie Oakes' study did not find significant differences in the amount of instructional time expended when low and high tracks in junior and senior high schools were compared (1985), but the expectations for homework time expenditures were significantly different (forty-two minutes on average for high tracks vs. fourteen minutes for low tracks). Is the myth, then, more an issue of teacher expectations than a grouping issue? Do teachers generally assume that low-achieving students are more likely to misbehave and act out and likewise assume that higher achieving students will not? Perhaps the type of disciplinary or behavioral issue differs in differing grouping levels, but the time spent on discipline and behavior modification is not discrepant. More recently, Chauvet and Blatchford (1993) have found that subjects placed in random mixed-ability groups performed significantly less well than those in either friendship groups or like-ability groups.

Myth 9: Without brighter students in a class, the quality of discussion and pro-academic norms go way down.

Reality: The "quality" of a discussion is a perception of the teacher, who may enjoy having a higher level of thinking going on for personal pleasure. Such discussion, however, may be very intimidating and alienating to lower level students in the class whose pace of learning is considerably slower (Start, 1995) and whose capacity for using higher order thinking may be more limited and infrequent (Nasca, 1983). This brings us to the issue of what purpose gifted students serve in the school system. Are they there to raise the average of the school on measures of school performance and mastery? Are they there to teach those who are struggling with the regular curriculum and its mastery? Are they there to make the teacher's job easier or more pleasurable?

When we think clearly about this, gifted students are there to learn, not to be exploited for the benefit of others. This means that these students' curriculum needs to be compacted in recognition of what they have already mastered, and they need exposure to advanced knowledge and skills at a considerably faster pace and with less review and practice than provided for students of other ability levels. With this new knowledge and skill, they need to apply and produce at higher levels of complexity and abstraction than other students. Compacting could certainly take place in a heterogeneous setting, but the difficulties of appropriate pacing and variable frequency of complex, abstract applications make the heterogeneous setting an impractical placement for most gifted students if their potential is to be fully developed.

The New Realities

Most of the research that has taken place since my foundational paper in 1991 has come to the same conclusions we have seen in this discussion of myths and realities, but three new patterns of research on grouping are emerging and it will be interesting to see what they add to our understanding of the merits of grouping for all ability levels.

Pattern 1: Mixed-ability groups have "mixed" results.

Dyads of low- and high-ability students are now being studied rather than small groups. Thus far, the researchers who have looked at this in the six studies

I have found, conclude that the low-ability students speak out more, behave more appropriately, and stay on task more but with no differences in overall individual achievement. The high-ability dyad members gain little from the interaction (e.g., Cohen & Lotan, 1995; Jones & Carter, 1994). Hence, if our goal is to socialize low-ability students, dyads work. If our goal is to improve their academic achievement, dyads are not the answer. For neither goal are dyads appropriate for high-ability students.

Pattern 2: Like-ability groups produce higher academic effects for gifted learners than mixed-ability groups.

A variety of studies since 1991 have come to this conclusion, from comprehensive syntheses of research (e.g., Goldring, 1990; Lou et al., 1996; Rogers, 1998). There just doesn't seem to be any way around the fact that gifted learners do better in every respect when they are placed together with others who are performing at their levels and share their interests and abilities. At the same time, the achievement effects for other ability levels are not so dramatic or definitive (Richardson & Fergus, 1993). Alternatives to like-ability groups have not produced earthshaking results and more research and experimentation needs to take place to find the best alternatives for these students (students of ability levels other than gifted). At some point, however, educators will have to weigh effort against outcome. Grouping lessens a teacher's efforts to help students master what they have not accomplished by homogenizing pacing and complexity needs. Hence, it is a fairly easy means for developing the potential of gifted learners. The academic gains are substantial and documented. What we want, however, are substantial effects for all students. This means time-intensive individualization/tutoring/mentoring efforts will be required for these other levels of ability. What should not happen, however, is to eliminate performance grouping for gifted students when it does get us where we need to be with academic outcomes.

Pattern 3: Smaller groupings for instruction produce higher academic effects for all students than whole-class instruction.

Only one study in recent years has suggested benefits for whole-class instruction: when it is used for drill and repetition of low-level convergent skills, such as math computation. The direct instruction research of the late 1970s reached

similar conclusions. The question, then, is how much of what we aim to teach students in schools today is low level and convergent? If one looks at standards from state to state, the aim has consistently been to move toward higher order learning, patterns, and concepts rather than details and facts.

Many educators have used time as the explanatory factor among differing performance levels for students: some students need more time to learn than others. If this is so, then students will need to be placed in smaller groupings according to the amount of time they need to master the standards. And with standards becoming more and more high end, the need for adequate time to master them becomes more and more critical. We can't expect the majority of students to sit around while the slowest ones begin to master what all can learn. This would fly in the face of full potential development for all. More experimentation must take place with what the composition of these small groupings should look like. Will these be friendship groups rather than like-ability groups? Are friendship groups the same thing as like-ability groups (do we choose others to be our friends based on the similarity of their abilities and interests to ours)? Do dyads prove to be more academically effective than groups of three or four? Do single-gender groups change the complexion of achievement in some subjects, such as math and science?

Our work on the grouping issue and how it impacts gifted children is far from done. We have a strong research base for our current practices, but we also have some responsibility for contributing to an understanding of grouping practices' effects on the achievement of all students, regardless of ethnic origin, socioeconomic class, ability, motivation, and performance levels. Perhaps there are even more effective ways to manage the instruction of gifted learners. Let's be on the cutting edge in finding those ways.

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