

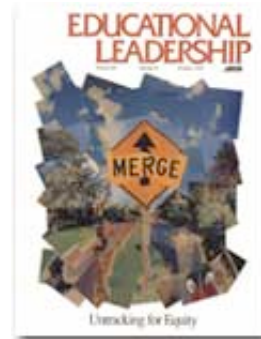
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Untracking for Equity Pages 11-17

Synthesis of Research / Is Ability Grouping Equitable?

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Grouping and tracking do not increase overall achievements in schools, but they do promote inequity, research suggests. To reduce inequality, we should decrease the use of both practices, and, where ability grouping is retained, improve its use.



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Ability grouping is one of the most common responses to the problem of providing for student differences, but is it an *equitable* response? Few questions about education have evoked more controversy.

Grouping has different effects in different circumstances. As currently practiced, it typically leads to *inequitable* outcomes. To place the debate in its proper perspective, we must remember that decisions about grouping are preliminary and that what matters most comes next: decisions about what to do with students *after* they've been assigned to classes. Given poor instruction, neither heterogeneous nor homogeneous grouping can be effective; with excellent instruction, either may succeed.

Drawing on the best research we have on grouping, I want to describe conditions that make one system or the other more likely to result in high achievement that is equitably distributed. Then I'll look at the challenges educators face depending on which approach to grouping they take. But, first, let's clarify two terms.

Tracking vs. Grouping

"Curriculum tracking" and "ability grouping" are sometimes used interchangeably. I use "tracking" to mean broad, programmatic divisions that separate students for all academic subjects. For example, high school tracks divide students into academic, general, and vocational programs. Elementary schools "track" students when they divide them into separate classes for the entire day.

I use "ability grouping" to refer to divisions among students for particular subjects, such as special class assignments for math or within-class groups for reading. "Ability," strictly speaking, however, is not usually the criterion for grouping. Rather, students are typically divided according to measured or perceived performance in school. Because school performance is related to social inequality outside the school, such divisions contribute to the separation of students from different racial, ethnic, and social backgrounds (Oakes et al. 1992).

Achievement Effects of Grouping and Tracking

To consider the effects of ability grouping, we need to keep two questions in mind. First, how does grouping affect the overall *level* of achievement in the school? This is a question about "productivity." Would the school produce higher achievement if ability grouping were eliminated?

Second, how does grouping affect the *distribution* of achievement in the school? This is a question about "inequality." Would achievement be more equally distributed in the absence of ability grouping? In the past, advocates of grouping have tended to focus on the first question, and critics have emphasized the second. To engage in a balanced discussion, we must examine both.

Grouping and productivity. Little evidence supports the claim that tracking or grouping by ability produces higher overall achievement than heterogeneous grouping. At the elementary level, most grouping systems fail to raise achievement. Some forms of subject-specific grouping—particularly within-class grouping for math and cross-grade grouping for reading—tend to have positive effects on overall achievement (Slavin 1987). The issue has received less attention at the secondary level, probably because almost all American secondary schools have some degree of tracking (Oakes 1985).

In a well-designed British study, Fogelman (1983) and Kerckhoff (1986) followed more than 9,000 students in grouped and ungrouped secondary schools for a five-year period, finding little difference in average scores on standardized tests of math and reading achievement.¹ The absence of overall differences between types of schools, however, masked important differences that occurred *within* the grouped schools.

Grouping and inequality. In the British study, there were no average differences between grouped and ungrouped schools because within the grouped schools, high-group students performed better than similar students in ungrouped schools, but low-group students did worse. Students in remedial classes performed especially poorly compared to ungrouped students with similar family backgrounds and initial achievement. With low-group losses offsetting high-group gains, the effects on productivity were about zero, but the impact on inequality was substantial.

In the United States, high school tracking results in similar increases in inequality. In a national survey that followed more than 20,000 students from grades 10–12, academic track students gained significantly more on tests of math, science, reading, vocabulary, writing, and civics, compared to similar students in general and vocational tracks (Gamoran 1987).² In fact, achievement gaps between students in different tracks widened more than the overall disparity between students who dropped out of school after 10th grade and those who stayed in school. This means that which program a student pursued in high school mattered more for achievement than whether or not he or she was in school! Unfortunately, studies like this one do not show whether increasing inequality occurred in the context of rising or falling achievement for the school as a whole, because tracked and untracked schools were not compared.

Elementary school studies also show increasing inequality over time (Weinstein 1976, Hallinan and Sorensen 1983, Gamoran 1986). Even when overall achievement rises, inequality may grow because high-group students often gain more than students in low-ability groups (Oakes et al. 1992).

Slavin's "best evidence syntheses." Perhaps the most comprehensive and careful reviews of research on ability grouping are Robert Slavin's reports of grouping and achievement in elementary (1987) and secondary (1990) schools. Other than the elementary school exceptions noted above, Slavin argued that ability grouping has no effects on either productivity or

inequality: grouped and ungrouped schools produce about the same level of achievement, and neither high, nor low, nor average groups obtain any special benefit or suffer a particular loss due to grouping. Slavin reached these conclusions after examining a diverse array of studies conducted over a 60-year period. Some of the studies showed positive effects; others yielded negative results, for productivity and inequality, as a result of ability grouping. Because the results averaged out to about zero, Slavin concluded that ability grouping has no effects and that the effects that appeared in many studies resulted from random or systematic errors of measurement (Slavin 1990).

I think another interpretation is more likely: the diversity of results does not mean the true effects are zero but, rather, that ability grouping has different effects depending on where and how it is implemented. The studies Slavin reviewed provided almost no information on what occurred inside the classrooms after students were assigned. In some studies, teachers may have provided exactly the same instruction to the grouped and ungrouped classes, and there would be little reason to expect achievement benefits *or* detriments to ability grouping. In other studies, teaching quality may have favored one group or the other, leading to outcomes that differed by group. Slavin's ultimate conclusion echoes a finding that is more than half a century old: ability grouping has no effects on achievement unless teachers use it to provide different instruction to different groups.³

I conclude that grouping and tracking rarely add to overall achievement in a school, but they often contribute to inequality. This finding is most consistent for high school tracking, but it is not uncommon in other forms and at other levels. Typically, it means that high-track students are gaining and low-track students are falling farther behind. But the effects of ability grouping are not the same in every context, and we need to discover how they come about in order to improve productivity and reduce inequality.

Sources of Achievement Inequality

Why does tracking often benefit high achievers but not their counterparts in other groups? Most research on grouping and achievement has failed to consider how students were treated after they were assigned to their classes. Fortunately, a number of case studies and a few surveys provide information on what goes on in different groups and tracks. These reports suggest that the quality of instruction and the climate for learning favors high-level groups and honors classes over low groups and remedial classes.

Unequal instruction. At the elementary level, several researchers have documented fast-paced reading instruction in high-level groups and slow-moving progress in low groups. This occurs for both within-class and between-class grouping (Barr and Dreeben 1983, Gamoran 1986, Rowan and Miracle 1983). From these studies, one cannot tell whether slower instruction in low groups meets the needs of these students or unnecessarily holds them back. When middle- and low-group students of similar prior achievement are compared, middle-group students gain more, suggesting that slow-paced instruction contributes to the low-group deficit. This interpretation is bolstered by a recent survey of elementary school mathematics classes, in which middle- and low-group students were significantly more likely than high-group students to say their class was too easy (Coley et. al. 1992). Other researchers indicate that low reading groups offer a less conducive learning environment, with more interruptions than middle and high groups (Allington 1980, Eder 1981).

Differences in context and climate have also been described at the secondary level. First, college-track students take more academic courses than students in other tracks, contributing to their achievement advantage (Gamoran 1987). Second, observers report that high-track

teachers are more enthusiastic and spend more time preparing (Rosenbaum 1976, Oakes 1991). Teachers may compete for the opportunity to teach honors and accelerated classes, and those with more experience or better reputations tend to win the privilege (Finley 1984, Oakes 1991). Although problem solving and critical thinking are not especially common, they are more likely to occur in high tracks than low tracks (Oakes 1985, Gamoran and Nystrand 1990). In contrast, low-track instruction tends to be fragmented, emphasizing worksheets and recitation (Page 1992). Teachers in low-track classes spend more time on behavior management and less time on instruction (Oakes 1985).

Unequal behavior and attitudes among students. These differences cannot be ascribed solely to teachers, however, because *students' responses* to instruction also differ across tracks and ability groups. Low-track students are off-task more often, spend less time on homework, and turn in fewer assignments (Oakes 1985, Gamoran and Nystrand 1990). Current data do not indicate whether low-track students respond less well because instruction is less engaging or whether instruction is less engaging because students are not responsive. Both processes are probably at work. Case study writers have long contended that tracking polarizes the student body into "pro-school" and "anti-school" groups (for example, Lacey 1970, Abraham 1989). The latest survey research supports this claim: Berends (1991) found that college- and noncollege-track students differ more over time in the extent of disciplinary problems, in engagement with schoolwork, and in expectations for future schooling.

What Can Be Done?

Although the research is not definitive, it does suggest two actions: reduce the use of tracking and grouping and improve the way ability grouping is used where it is retained.

Reduce the use of tracking and grouping. Generally, the more rigid the tracking system, the more research studies have found no benefits to overall school achievement and serious detriments to equity. Students who report being assigned to different tracks in high school become more unequal in their achievement over time, and the increase in inequality is greatest in schools where students rarely change tracks (Gamoran 1992). In elementary schools, between-class grouping for the entire school day is least likely to show any benefits (Slavin 1987). As Slavin (1987) explains, rigid tracking systems are likely to fail because when a single division by ability is made for all subjects, classes remain heterogeneous on most skills, so there is no improvement in the fit between students' needs and the provision of instruction. In addition, rigid tracking systems may be more likely to induce polarized attitudes toward schooling (Gamoran 1992). In moving to reduce the use of grouping, then, the first step should be to eliminate the most rigid forms of tracking, such as broad, inflexible program assignment in high schools and between-class tracking for the whole day in elementary schools.

Efforts to reduce tracking must grapple with the fact that in at least some cases, high-track students perform better than similar students in heterogeneous classes. The elimination of grouping must be accompanied by staff development opportunities for teachers to learn strategies for enhancing the learning of all students in classes that are more diverse than those to which they are accustomed. At the same time, those who strive to maintain ability grouping out of concern for high-track students must come to grips with the growth in inequality that occurs in many cases.

Improve the use of ability grouping. To the extent that grouping is not completely eliminated, it must be implemented more effectively than is typical. First, it is essential to avoid locking in teachers and students to their track assignments. Permanent assignments result in a vicious cycle, in which the expectations of teachers and students enter a downward spiral (Page 1992). Schools must make at least two sorts of investments to bring greater flexibility to their grouping

systems: (1) they must reassess students' capabilities and take new information into account when making assignment decisions, and (2) they must enable students to make up curricular material they may have missed—for example, in tutorials during the school year or the summer—so that those who are ready to advance are not held back by lack of curriculum coverage. The latter requires investment not just by schools, but by students as well, who must undertake extra work to catch up. Implementing more flexible grouping systems also means rotating teachers so that all students have opportunities to learn from the most effective teachers and to prevent the loss of morale that sometimes occurs for teachers who are assigned to low tracks year after year.

Second, those who use ability grouping must improve instruction in low groups. This could, at the same time, reduce the inequality that often results from grouping and raise the overall level of achievement in the school. This recommendation is extremely difficult to follow—indeed, were it not so difficult, ability grouping would be a lot less controversial! It is difficult because (1) by virtue of their assignment, teachers and students in low tracks have low expectations for academic work; and (2) low-track students often resist challenging academic work. One observer found that low-track students preferred worksheets to discussion, because the seatwork kept private what students did and did not know (Metz 1978).

Is it even possible? Can high-quality instruction ever take place in low-status groups? We have many more examples of unsuccessful low-track classes than successful ones, but there are some circumstances under which low-group students receive effective instruction. At the elementary level, grouping systems that divide students on the basis of skills closely related to the curriculum and those that adjust curriculum and instruction to address students' needs are more likely to be effective. This conclusion is based on studies of within-class grouping for math and cross-grade, subject-specific grouping for reading (Slavin 1987), but the conclusion is probably generally valid.

At the secondary level, a few case studies suggest that low-track classes may serve their remedial purpose—that is, they allow students to catch up, or at least prevent them from falling further behind—under the following conditions:

- Teachers hold high expectations, manifested by their emphasis on academic work.
- Teachers exert extra effort, compared to their efforts in other classes.
- Teachers and students have opportunities for extensive oral interaction.
- There is no procedure in place that assigns weak or less experienced teachers to the lower track (Page and Valli 1990, Gamoran 1991).

These case studies rely on private schools mostly with middle-class students, and we have as yet no evidence that they generalize well to other situations.

One 9th grade English teacher I observed, whose low-group students kept pace with their peers in other classes, told her students: "I know it's not easy, you guys—I know it's not easy—but we're not going to read *Weekly Reader* in this class. All right? You deserve to have this information, so stick with it." With such a persistent teacher, and equally persistent students, low-track classes may be effective, but the phenomenon is too rare for one to have confidence that it will become the general case anytime soon. All the more reason to curtail tracking and grouping where possible.



Highlights of Research on Ability Grouping and Achievement

- Ability grouping rarely benefits overall achievement, but it can contribute to inequality of achievement, as students in high groups gain and low-group students fall farther behind. The more rigid the tracking system, the more likely these patterns are to emerge.
- When students are grouped according to skills that are closely related to the curriculum, and when curriculum and instruction are tailored to students' capacities, ability grouping may raise achievement. Research at the elementary level supports this claim more so than at the secondary level, where there are few examples of effective instruction in low-ability classes.
- The use of ability grouping should be curtailed, starting with its most rigid forms: permanent program assignments in high schools and between-class grouping for the whole school day in elementary schools.
- Where grouping is not eliminated, its implementation must be improved: neither teachers nor students should be locked into their assignments, and the quality of instruction in low groups must be raised.

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Endnotes

¹ The British study is remarkable in its comprehensiveness: it began with nearly every child born in England, Scotland, and Wales during the first week of March 1958 and followed them from birth to age 23. The ability-grouping analyses covered the period from age 11 to 16. The study is also especially valuable because it includes a large number of comparable schools that used and did not use tracking, or "streaming" as it is called in Britain. In the United States, it is impossible to find a representative sample of secondary schools in which students are not grouped in math and English.

² These differential gains occurred for students who were statistically equated in prior achievement and background characteristics. In general, students in the different tracks are far from equal in these areas, so the gross differences between tracks were much larger.

³ Slavin has stated: "For ability grouping to be effective at the elementary level, it must create true homogeneity on the specific skill being taught, and instruction must be closely tailored to students' levels of performance" (1987, p. 323). For the secondary level, he remarked: "The lesson to be drawn from research on ability grouping may be that unless teaching methods are systematically changed, school organization has little impact on student achievement" (1990, p. 491). Compare these to what Ethel L. Cornell concluded in 1936: "The results of ability grouping seem to depend less upon the fact of grouping itself than upon . . . the differentiations in [curricular] content, method, and speed, and the technique of the teacher" (p. 304).

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