



Quick Facts about Math & Tracking

Q: Will taking away tracks in math (e.g. honors track math courses) help all students achieve at higher rates?

A: Studies demonstrate the positive impact of math coursework sequences that put all students through the same courses rather than tracking students based on their perceived ability.

Researchers from Columbia University found the probability of completing advanced math courses and math achievement increased in all groups when middle school students were enrolled in mixed-ability math courses.¹

Figure 1: Increase in % of students participating in de-tracked middle school math courses that took courses beyond Algebra 2 in high school

Average achievers	81% → 91%
High achievers	89% → 99%
Low socioeconomic status	32% → 67%
Black and Latino students	38% → 58%

From: Burris, Heubert, and Levin (2006)

More high achieving middle school students in these mixed ability courses took the AP calculus exam and scored higher than students in tracked courses.

This study of six middle school math classes in New York found that students' probability of completing advanced math courses beyond Algebra 2 in high school increased across all groups, including high achieving students. Also, the average scores on achievement tests

for high achieving students who learned in math courses without tracks, i.e. heterogeneously grouped, were not significantly different than high achieving students' scores in tracked math courses.

Researchers from Stanford University and Kings College in London found all middle school students performed below their potential when in tracked math courses, both in high tracks and low tracks.²

This study of over 1000 students in London schools examined students' perceptions of going from mixed ability to tracked math courses during middle school. The results suggest that all students were negatively affected by the tracked math courses whether they were in the low track or high tracks.

Students in higher tracks in math were disadvantaged by fast paced lessons and pressure to succeed.

¹ Burris, C.C., Heubert, J.P, and Levin, H.M (2006). Accelerating Mathematics Achievement Using Heterogeneous Grouping. *American Educational Research Journal*. Vol. 43 No. 1, p. 137-154.

² Boaler, J., William, D. and Brown, M. (2000). Students experiences of ability grouping-disaffection, polarization, and construction of failure. *British Educational Research Journal*. Vol. 26, No. 5., p. 631-648.