High levels of student mobility mean that kids who begin school in poor neighborhoods may not stay there.

Are children born into poor neighborhoods with bad schools destined to remain there? In new research that tracks student mobility in New York City public schools, Sarah Cordes along with co-authors Amy Ellen Schwartz, Leanna Stiefel, and Jeffrey Zabel, find that while many students begin school in very poor neighborhoods, more than 40 percent move between grades one and ten, with many moving to areas with better schools. They find that while moving in general has a negative relationship with student performance, if students move to an area with better quality schools, this can overcome the negative impacts of moving.

Does the neighborhood that you grow up in determine your life outcomes? This is the question we seek to answer in new research which explores the relationship between origin neighborhoods and later schooling outcomes. Understanding early neighborhood experiences is important for determining whether students are “stuck” in neighborhoods and ultimately destined for poor schooling outcomes or whether it is possible to escape disadvantage through moving neighborhoods and schools. We look at how students’ early neighborhood and schooling experiences are related to later success in school and explore how much differences in academic outcomes can be explained by changing neighborhood and school contexts.

To do this, we draw on a rich longitudinal database containing individual-level data for a complete census of students attending New York City (NYC) public schools. We construct a panel containing all students enrolled as first graders in NYC public schools in 1996-97 and trace them for eleven additional years, through what would be their 12th grade year if they made standard academic progress (annual one-grade promotion). Importantly, we have annual information on each student’s zip code of residence so that we are able to observe students’ “origin” neighborhoods in first grade and track neighborhood moves over their schooling careers.

There is wide variability in origin neighborhood experiences in terms of neighborhood poverty and student outcomes. While some students live in neighborhoods with very low levels of poverty (1.3 percent of families with children under 18 below the poverty line), other students begin first grade in neighborhoods where more than half (54.5 percent) of families are poor. As shown in Figure 1, as many as 15.5 percent of neighborhoods in which students reside exhibit extreme poverty (above 40 percent). Of course another important dimension of neighborhoods is the schooling outcomes of the students who live there. Like poverty, these outcomes vary widely. While some neighborhoods graduate high shares of students (91 percent of students enrolled in 10th grade) others have much more troubling statistics, with 17.2 percent of neighborhoods graduating less than half of the students who enroll in 10th grade.

Figure 1 – Percent Poor Students and Families by Neighborhood, AY 1996-97
Notes: Density is over the total number of neighborhoods (169), where neighborhood is defined as students’ zip code of residence. Percent of families below the federal poverty line is based on the 2000 Census.

Does this mean that students born into bad neighborhoods are destined for poor outcomes? Not necessarily—we find that rather than being “stuck” in origin neighborhoods, there is a high degree of mobility between neighborhoods among NYC public school students. More than one quarter of students move neighborhoods at least once between grades one and five and 40 percent move neighborhoods between grades one and ten. Furthermore, there is considerable mobility out of high poverty neighborhoods. Many students also experience a significant change in school quality over their schooling careers, with 23.4 percent of students experiencing a significant increase in school quality and 26.5 percent experiencing a significant decrease in school quality. Student movement to better or worse schools conditional on origin school quality reveals some particularly interesting patterns. While students in the lowest quality schools are the most likely to move to a significantly better school, the reverse is not true—students at both the high and low quality schools are equally likely to move to a significantly worse school. First grade schools are not “destiny,” particularly for students in low quality schools.

Given the high degree of mobility among students, the next natural question is whether this movement is related to later educational outcomes. To explore this, we estimate models using multiple regression, a statistical technique that allows us to compare the outcomes of mobile and non-mobile students controlling for a host of other characteristics. In other words, it allows us to compare the outcomes of students who moved to otherwise similar students who did not move. In some models we also include student fixed effects, allowing us to compare the outcomes of each student to him or herself before and after a move. Using these models we examine a number of performance measures including 8th grade test scores, New York State high school exam scores (Regents exams), and high school graduation outcome at the end of 12 years.

In both the short and long term, residential mobility tends to be negatively related to schooling outcomes, but moving to a significantly better quality school is positively related to student performance and may mitigate/overcome the additional negative impacts of moving to lower quality neighborhoods. All types of moves appear to be harmful for attainment, however, prolonging the time to 5th, 8th, and 10th grades (for more detailed work on the impact of residential and school moves, see here).
Overall, our analysis presents evidence that moving neighborhoods is not "all about schools," as changes in neighborhoods and neighborhood poverty continue to have significant (albeit negative) relationships with long-term student performance, even when controlling for changes in school quality. This is not to imply that schools do not matter; in fact, moving to a higher-quality school has positive effects on short- and long-term student performance, and in some cases these are large enough in magnitude to swamp the additional negative effects of moving to a worse neighborhood.

These results have important implications. Students and families who make moves to higher quality neighborhoods are unlikely to be “typical,” but are probably different in important respects (e.g., more concerned about their children’s education outcomes, more ambitious, more informed, etc.). Nonetheless, these families do manage to move themselves in ways that improve outcomes for students, even when they begin in poor neighborhoods and low quality schools. Thus, there are possibilities for improving the life chances of central city students, so that neighborhood is not destiny. Providing enough “good” schools, helping families choose the good ones when they move neighborhoods, and allowing them to stay in good schools if they must move neighborhoods, are all mechanisms that could improve student outcomes.

This article is based on the paper, 'Is neighbourhood destiny? Exploring the link between neighbourhood mobility and student outcomes', co-authored with Amy Ellen Schwartz, Leanna Stiefel, and Jeffrey Zabel, in Urban Studies.

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