

**WHO'S ON THE BUS?  
THE ROLE OF SCHOOLS AS A VEHICLE TO INTERGENERATIONAL MOBILITY**

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**Elongated Abstract:**

*Introduction.* Access to quality schools and educational resources for children are key engines of upward mobility in the US, holding the potential to break the cycle of poverty from one generation to the next. Residential segregation by race and class that leads to unequal access to quality schools is often cited as a culprit in perpetuating inequality in attainment outcomes. However, the role of child neighborhood and school quality factors in contributing to the intergenerational persistence of economic status, and as sources of racial differences in rates of intergenerational mobility, have received little attention in the literature.

This paper analyzes the effects of the court-ordered desegregation plans of public schools, implemented in the 1960s, 70s, and 80s, on the extent of intergenerational mobility. I exploit the wide variation in the timing of implementation of desegregation plans to identify their effects. The empirical analysis makes two unique contributions by investigating: (1) the effects of court-ordered desegregation plans of public schools on adult socioeconomic attainment outcomes and attempts to separately identify the effects of neighborhood and school quality; and (2) the role of childhood school and neighborhood quality in contributing to racial differences in intergenerational mobility.

*Background & Motivation.* The nature and amount of public investment in children has changed substantially during the post-World War II era. The major thrust of policies aimed at equality of opportunity over this period has been intended to ensure educational access to quality resources K-12 and beyond, and more recently greater investments in pre-school years. Over the past four decades, three major government interventions have had substantial impacts on the provision of school resources and which have narrowed black-white differences in access to dimensions of school quality: 1) court-mandated school desegregation; 2) state legislation and legal action aimed to change the distribution and level of school funding; and 3) the expansion of targeted early childhood pre-school programs for disadvantaged children through Head Start.

There is an impressive body of evidence on the measurement of intergenerational mobility and the extent of mobility for different countries and over time (see for example Bjorklund and Jantti, 1997; Solon, 1992). However, little is known about the precise mechanisms underlying the persistence of economic status across generations. That is, identifying what factors inhibit or facilitate upward mobility for those born into humble

beginnings have remained illusive. Identifying the major factors and pathways that lead to economic (im)mobility is important for the optimal design of education policies and implementation of effective childhood interventions to promote greater equality of opportunity. There is currently a paucity of direct evidence from the US on the effects of school quality on intergenerational income mobility.

*Paper's Contribution.* This paper extends two branches of literature on economic mobility: 1) the relationship between school resources/quality and socioeconomic success; and 2) racial inequality in adult socioeconomic attainment outcomes that are rooted in childhood conditions. At the nexus of these two literatures, this paper examines the role of school quality as the key propeller of upward mobility. An important contribution of this work is that it uncovers sources and identifies mechanisms underlying generational mobility. I integrate the analysis of the linkages between educational investment opportunities across the continuum of developmental stages of childhood—including pre-school program participation, K–12 school resources—to investigate their long-run consequences on the extent of intergenerational mobility.

The study analyzes the economic status trajectories of children born between 1950 and 1975 followed through 2007 using data from the Panel Study of Income Dynamics (PSID) and its supplements on early childhood education, where the data have been geocoded to the census block level. This analysis uses the longest-running US nationally-representative longitudinal data spanning four decades. To this PSID data, I link multiple data sources containing detailed neighborhood attributes and school quality resources that prevailed at the time these children were growing up.

The paper investigates the long-run impacts of school quality inputs spanning the development stages of childhood through young adulthood—from pre-school to K-12 to college and beyond—on subsequent adult economic status. I investigate the extent to which patterns of segregation influence whether schools weaken or reinforce the role of family background in determining children's outcomes. I compare the intergenerational mobility rates across communities (time periods) with differing access to educational opportunities and school quality, separately by race. In this way, this analysis considers a narrower slice of the broader question: how does where you live influence life chances and economic success?

The primary difficulty in disentangling the relative importance of childhood family, neighborhood, and school quality factors is isolating variation in neighborhood and school quality characteristics that are unrelated to family factors. I exploit policy-induced changes in per-pupil spending and school resources that are unrelated to child family- and neighborhood-level determinants of adult economic status. This paper investigates the long-run consequences of dimensions of childhood school quality on adult economic status. In particular, the analysis considers long-run consequences of participation in pre-school programs such as Head Start, public school quality during adolescence (per-pupil spending, class size), K-12 private school attendance, college quality (institution's expenditures per-student), and parental and neighborhood expectations for child achievement. I measure school quality as the purchased inputs to a school (per-pupil spending; class size; teacher quality; quality of the curriculum). Furthermore, I evaluate effects of advanced placement/gifted, placement in special education, grade repetition, expelled/suspended from school (exhibiting problem behaviors in school).

The key contributions of this work are three-fold:

1. I document black-white intergenerational economic mobility differences by birth cohort and region of upbringing.
2. I investigate the determinants of mobility using an extensive set of childhood family and neighborhood background characteristics (including schools).
3. I attempt to explain black-white mobility differences and why they narrowed significantly for successive cohorts born between 1955-1975, with a focus on the role of school quality.

The paper provides a more detailed descriptive portrait of intergenerational economic mobility in the US. The findings improve our understanding of the intergenerational mobility process in the US and illuminate the central role schools play in the transmission of economic success from one generation to the next.

Main findings:

- Estimates of intergenerational mobility separately by race, birth cohort, and region of upbringing, revealed there are substantial differences along all of these dimensions that are related to aspects of school quality.
- I find that about XX of the intergenerational persistence and XX of the cross-sectional disparity in permanent income are accounted for by school/neighborhood quality and investments in education (including early education).
- I find that differences in early education and school quality are among the most important components of the persistence in income across generations.
- Declines in the student-teacher ratio, an indicator of improvements in the quality of instruction in schools, led to increases in mobility.
- Increases in subsequent income mobility and decreased persistence in the (upper and lower) tails of the income distribution were associated with the implementation of court-ordered school desegregation during their school-age years.
- I document a sharp increase in generational income mobility among African-Americans among successive birth cohorts born between 1955 and 1975 and show its relatedness to dimensions of access to school quality.
- African-Americans who grew up following school desegregation implementation were more likely to occupy a higher position in the income distribution than their parents, and distances moved across the distribution were greater, relative to those experienced for prior birth cohorts who were 18 or older at the time of their schools desegregation implementation.

The impacts were the result of a combination of increases in the levels of educational attainment and in the returns to education.