

Hanselman, Paul (2014). *Teacher Effectiveness and Equality of Educational Opportunity*.

Abstract

This dissertation assesses the allocation of effective teachers across economic/racial groups and its impact on educational inequality. By teacher effectiveness, I mean the effect (on measured standardized achievement) of assignment to an individual classroom teacher, relative to assignment an average teacher; effective teachers are those whose students tend to learn the most throughout the school year, compared to similar students taught by other teachers. Conceptually, I argue that variations in teacher effectiveness indicate substantial, if complex, underlying differences in the opportunities to learn that students experience in school, which are at the heart of how formal schooling influences educational inequality. Empirically, I use existing value-added models to estimate teacher effectiveness in an administrative dataset of all public school students in grades 3 to 8 in North Carolina between 2007 and 2013. I use these value-added estimates of effectiveness to assess questions about the distribution and effects of teachers across economic and racial groups.

There are three main findings, corresponding to three sets of empirical analyses. First, considering basic exposure to teachers, I find substantively small differences in the teacher effectiveness experienced across economic and racial groups, both on average and throughout the distribution. The opportunities to learn represented by teacher effectiveness vary widely among individual students within each group but do not seem to contribute to differences between groups. Second, considering heterogeneous effects, I find that exposure to an effective teacher is somewhat more beneficial for educationally disadvantaged groups (poor, African American, and Hispanic students). This supports theories that school learning opportunities are compensatory with respect to home advantages, and suggests that increasing teacher effectiveness would promote both better outcomes overall and greater equity. Third, considering the sequence of exposure to teachers over time, I find large effects of cumulative exposure to either effective or ineffective teachers, but little consistency in students' teachers from year to year. Therefore, a run of "good" or "bad" teachers can be hugely influential, but few students experience only one type of teacher or the other.

In total, this work contributes to the broad debate about the role of formal schooling in educational stratification. The findings challenge the intuition that schools principally exacerbate inequality by providing better resources to more advantaged students. Instead, the results offer two specific pieces of support to the "Great Equalizer" hypothesis that schooling tends to mitigate disparities rooted in social background: (1) the opportunities to learn related to individual classroom teachers are equitably distributed across student groups, and (2) the effects of these opportunities are compensatory with respect to economic and racial background.