

Dissertation Proposal

Essays on Education Economics

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3:30 pm

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My dissertation examines the school enrollment and migration choices of households with children in response to specialized school programs and school quality. My analysis focuses on large urban districts where student retention has become a major issue in the face of large declines in student enrollments during the last decade.

My first essay¹ examines whether gifted programs can help urban districts retain students with higher SES backgrounds. Gifted programs often employ IQ thresholds for admission, with those above the threshold being admitted. These types of admission rules are often mandated by state rules and create strong incentives to manipulate the IQ score of students to increase access to the program. We propose two new tests that can be used to detect local manipulation of IQ scores. In the presence of local manipulation, the standard regression discontinuity estimator does not identify the local average treatment effect of the program. We show how to modify the approach to construct a lower bound for the effectiveness of the program. This lower bound can be estimated using a modified RD estimator. Our application uses a new and unique data set that is based on applications and admissions to a gifted program of an anonymous urban school district. Our point estimates suggest that there is a favorable effect on retention for students in higher SES households.

My second essay examines how demographic changes, within-metropolitan migration, and expanding school choice have impacted enrollment in the central city public school districts in several large metropolitan areas in the United States. I use neighborhood census information along with public, charter, and private school data on enrollment and student demographics. Additionally, I plan to use detailed Census 2000 migration data to document and analyze the location (by school district) choices of households. I expect to find differences in migration behavior for households making residential decisions along with school access choices versus those making only a residential decision. Specifically, I expect to find that school district characteristics significantly impact migration behavior, particularly for households with children.

¹ Co-authored with John Engberg, a senior researcher at the RAND Corporation; Dennis Epple, the Thomas Lord Professor at Carnegie Mellon University; Holger Sieg, the J.M. Cohen Term Professor of Economics at the University of Pennsylvania; and Ron Zimmer, Associate Professor at the School of Education at Vanderbilt University.