

Poor kids in rich schools: The effects of school quality and social interactions in Delhi, India

Gautam Rao, grao@econ.berkeley.edu

I exploit an unusual natural experiment in education policy to study a set of questions related to access to high-quality education in developing countries. The natural experiment emerged from a policy innovation dating to 2006, which forced private schools in Delhi to provide 25% of their seats free-of-charge to students from poor households. This intervention has the potential to significantly improve prospects for equitable growth: attending better schools might greatly increase the academic achievement and future earnings of poor students, and the unusual mixing of students from affluent and disadvantaged backgrounds has the potential to change social preferences and attitudes towards poverty and related policies amongst the rich. I seek to answer the following questions:

1. How does attending a higher quality school affect the learning, cognitive skills, noncognitive skills and health of students from poor families? Consequently, what role does the present school system play in perpetuating inequalities in learning and future life outcomes?
2. How do parental investments in child health and education respond to the child attending a higher quality school? How are other children in the household affected, and what does this reveal about the nature of household decision making?
3. Does the mixing of students from very different social backgrounds affect the civic attitudes, social preferences and aspirations of both the fee-paying wealthy students and the scholarship students? Early results on this part of the project suggest that having poor students as classmates causes affluent students to become more charitable towards the poor. This effect appears to be driven by a change in deep social preferences (a greater weight placed on fairness or inequity-aversion), not simply changes in information about the poor. The effect persists in the lab and the field.

These questions are of substantive importance: the Indian government is considering extending this policy to the entire country in the next few years, yet no careful analysis of the success of the program in Delhi yet exists. Many other countries also suffer from poor quality of public education, and the simultaneous existence of elite high-quality schools with low-quality public schools is common. Lessons learned from the Delhi experiment could thus inform policy in the rest of the world. But there is much to be learned of theoretical importance as well:

1. The causal effect of schooling, and particularly school quality on learning and labor market outcomes is a question of great interest to both academics and policymakers, yet one that is difficult to resolve due to issues of differential sorting and selection of students into different types of schools. I am able to resolve this identification problem by exploiting an institutional requirement that admissions be randomized amongst scholarship applicants to private schools. This allows me to identify a control group of students who applied for the scholarship program, but were rejected entirely by chance.
2. Early life investments in child health and education are believed to have a powerful impact on future life outcomes. Gaps across socioeconomic status in measures such as cognitive and noncognitive skills emerge at an early age and persist over time, and a large literature has linked these gaps to inequality in parental investments in children. We will examine how parental investments in child health and education respond to the child's admission to a school of substantially higher quality. This allows us to learn whether parents consider their investments in their children's education to be substitutes or complements for school quality.
3. Social preferences and civic attitudes: The costs of class and ethnic divisions within countries are well documented. However, there is less understanding of how attitudes towards other groups may be changed by policy interventions. The sudden and largely forced integration of students from very different classes of Indian society has the potential to alter attitudes and social preferences in powerful ways. I use a combination of experimental techniques developed in behavioral economics, together with measures of "field" behavior such as volunteering for a charitable organization and attending play dates with poor students.

**My research plan for the next year involves:**

- (a) Expanding the sample of affluent students within the elite schools by about 40%. This will allow me to better study treatment effect heterogeneity. In addition, I have developed new outcome measures which focus on the ability of affluent students to cooperate with or discriminate against poor children in a very natural setting (on the playfield).
- (b) Tracking down students who applied to the scholarship program, but were rejected. These students will be administered tests of social preferences, as well as standardized tests in language and math and measures of child health. In addition, parents and siblings will be surveyed to learn about the parental investments in child education and possible sibling spillovers.