Delivering Education

A Pragmatic Framework for Improving Education in Low-Income Countries

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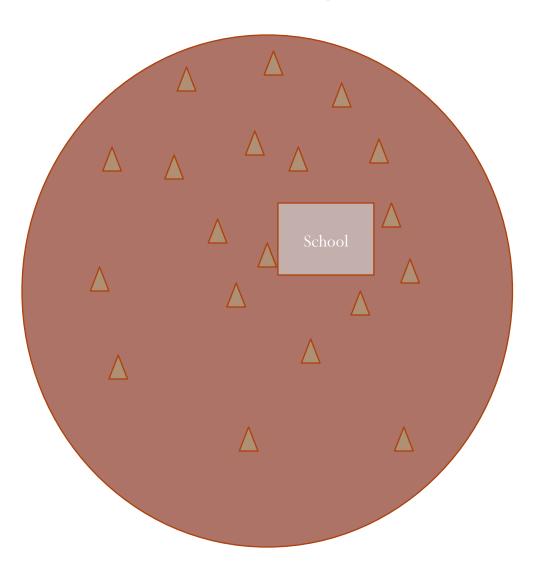
(Center for Policy Research, New Delhi and World Bank, Washington DC)

Based on the Learning and Educational Achievement in Punjab Schools (LEAPS) project with Tahir Andrabi (Pomona College) and Asim Khwaja (Harvard). The original team included Tara Vishwanath (MENAPR) and Tristan Zajonc (Harvard).

A synopsis

- We now have some of the best researchers working in education in low and middle-income countries
- Map out one part of an ongoing research agenda
 - Delineate potential differences in approach and questions
 - Discuss whether our way of thinking is productive
 - And if so, how to fill the gaps

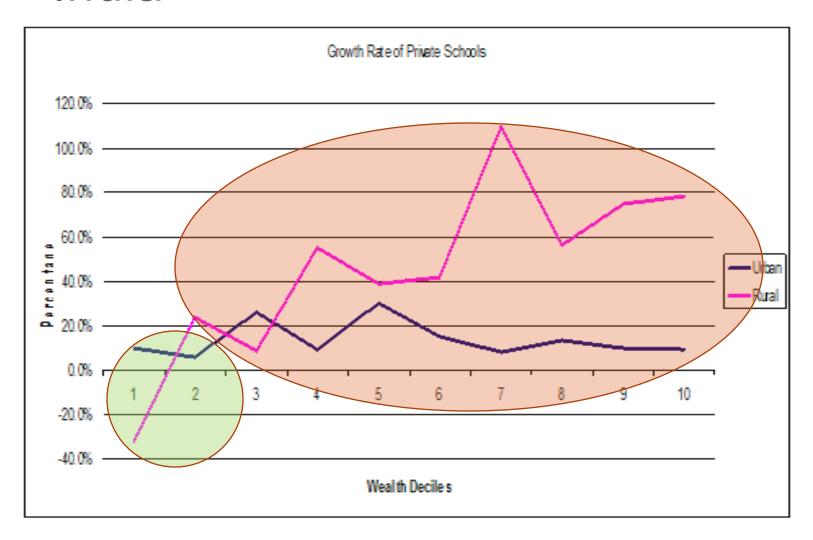
Motivation: The way it used to be



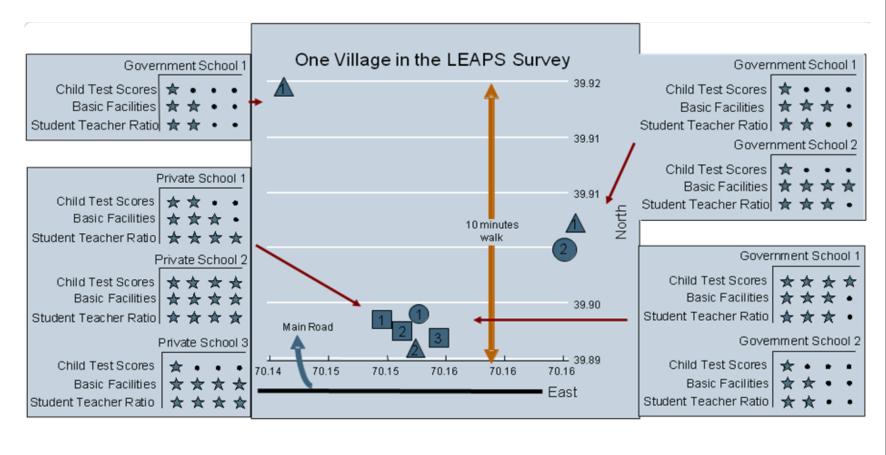
The way it is now



India



The way it is now



- Private School (All Co-education)
- Government School (Boys)
- Government School (Girls)

How to "fix" the system depends on what we want out of it

But, who decides what schools should produce?

What is our measure of welfare?

An ancient debate

"In too many instances the parents are unfit guardians of their own children...the children must be gathered up and forced into school" (Massachusetts Teacher, circa 1850)

Who adjudicates?

"It is to you, my lords to take this task (education) in hand, for if we leave it to the parents, we will die a hundred times over before the thing could be done" (Martin Luther, 1520)

"The child should be taught to consider his instruction, in many respects, superior to the parent in point of authority...The vulgar impression that parents have a legal right to dictate to teachers is entirely erroneous" (California State Superintendent of Public Instruction, 1864)

"Our young people, most of whom have no aptitude for Latin and are growing up to be artisans, are better served by a German teacher than a Latin master, for they need to learn writing and reading, which of great help to them in their work and livelihood" (Heidenheim, Germany)

Source: Andrew Coulson, Market Education

This time is different

We can now look at and answer fundamental questions regarding the functioning of the private sector without subsidies and minimal regulation, albeit with a state sector alongside. At the very least, bringing modern empirical methods to bear on these issues allows us to discern fundamental parameters of what parents want from a schooling system, allowing us to make better judgments of what the role of the state should be.

Research Agenda

- Suppose we don't want to make ex ante judgments about
 - What input mix is correct for a school
 - Different schools may have different optimal mixes
 - What matters to parents
- Can we use a market failure approach to the role of the state?
 - Hypothesize a market failure, fix the market failure
 - Strict approach (no externalities): Increase in trade implies improvement in welfare
 - In addition: Check to see what happens to measured outcomes (welfare again!)
 - If improvement, we have learnt something about parental preferences and the market failure

Examples of addressing market failures

Information as a market failure

Providing information in markets

- Increases enrollment by 5% (increase in trade)
 - Reduces private school prices (more so for the initially better ones)
 - Increases village-level test-scores by 0.11 standard deviations, driven by initial low performers among private schools (0.33 standard deviations)
 - Increases in public school test-scores by 0.1 standard deviations
- Consistent with theory of pricing and quality choice under asymmetric information

Source: Andrabi, Das and Khwaja: Report Cards

Credit as a market failure

- Experiment is cash grants to schools
 - Low Intensity: 1 school in village is offered a grant
 - High Intensity: All schools in village offered grants
- Multi-level randomization
- Monthly Revenues: 12% higher in both treatment groups relative to control (increase in trade)
 - Enrollment: increase of 12% in treated schools in low-intensity villages; smaller, non-significant, increase in high-intensity villages
 - Test Scores: high-intensity schools increase test scores by 0.11-0.17 standard deviations across different subjects
 - no effect in low-intensity
- Distinguish a credit-constraint from a policy effect

Teacher supply as a market failure

- Experiment: Helicopter drop teachers into villages
 - (I wish). In reality, use IV strategy for placement of girls' secondary schools, who we hypothesize produce potential teachers
- Note: To test if teachers are a constraint, it would be difficult to look at public schools, since they do not necessarily respond to supply shocks
- Private schools 3x more likely to arise in villages that received helicopter drop (increase in trade)
 - Supply effect because wages are lower in these villages

Summarizing

- An alternate research agenda that uses the rise of private schools as a "laboratory" to return to the fundamental question of underlying market failures, and thus the role of the state
- Some progress on some fronts
- Much we don't yet understand
- Broader usefulness of this approach?