The challenge of educational equity

Abhijit Vinayak Banerjee
Department of Economics and Abdul Latif Jameel Poverty Action Lab, MIT
We should have been celebrating

- The last two decades have been decades of enormous expansion in education
- In many parts of both East and West Africa and almost all over South Asia, school enrolment has grown very rapidly
- In many of these places school enrolment rates are now over 90% in the 6-12 age group
Yet

- One senses a certain despondency
- The main problem is that children enrolled in school does not seem to imply that children are learning
- According to ASER, 60% of 4th graders and more than 40% of 5th graders in India read at 2nd grade level or below
  - 70% of 4th graders and 60% of 5th graders can do simple divisions
- Very similar results in Pakistan (LEAPs report), Kenya (Duflo, Dupas and Kremer)
What is the problem?

1. Unreceptive students: unmotivated children, ill-prepared to learn, inadequate support at home.

or

1. Inadequate teachers: unmotivated teachers, poor pedagogy, low quality materials
Children

- Some evidence of low child/parent motivation
- Child attendance rate in ASER is around 70% on days when school is open
- However, child motivation is in part an outcome of the teaching/learning environment
- If you are totally lost in class, then it is hard to be motivated
Is child motivation a problem?

- Results from a randomized experiment in Jaunpur, India:
- This is an area where child attendance is 50%.
- 15% of children age 7 to 14 could not recognize a letter.
- Only 39% could read and understand a simple story (of grade 1 level).
- 38% could not recognize numbers.
- In 65 randomly chosen villages, Pratham, an educational NGO, recruited volunteers through information and discussion of learning levels.
- In each village, several “volunteers” with high school education were given one week of training on teaching reading.
Children can learn fast…

- Volunteers conducted evening “camp” for 2 months.
- One year later, the average child who could not read anything at baseline and who attended the camp was 60 percentage points more likely to decipher letters.
- The average child who attended the camp and who could decipher letters, but not words, in the baseline was 26 percentage points more likely to be able to read and understand a story compared to control.
- Combined with natural progress over a year, this means that 100% of those who attended could read letters.
- 35% of those who could do letters now read stories.
But…

- Only 8% of the children (and 13% of those who could not read at all) attended camp.
- Did parents know that there was a problem?
- Pratham had done an extensive campaign in 130 of these villages testing a large fraction of the children, teaching parents how to test, and sharing the results.
- Did not do anything to complain to the school system or shift children to a better school (even absent the camps).
- Consistent with evidence from Pakistan that parents in (randomly chosen) villages that got a negative “school report card” don’t shift their children.
Education as a lottery

- Consistent with a theory that says that parents see education as a gamble with long odds: if my child is smart, she will make it; otherwise, too bad. No point in fighting fate
- Evidence from Pakistan that parents of girl children who they believe to be “smart” are very happy to send them to private school, over their “less smart” boys (LEAPS)
- Happy to give it a shot, but starting from an essentialist view of the child’s capacity
- Unfortunately, given the schools, they may well be right
The teachers

- Low attendance rates have now been documented in many countries (World Absenteeism Survey)
- Average absence rates for India: 25% (27% in Uganda)
- Is absence a serious problem? Evidence from a randomized trial of cameras in Rajasthan, India, for monitoring teacher presence with presence-based incentives in NGO schools (Duflo, Hanna, Ryan)
  - Absence dropped from 42% to 21%
  - Test scores went up by about 0.2 standard deviations
But is that a lot?

- One way to look at this is to look at children who go to private schools
- Lot of self-selection (though in South Asia, less than one would imagine because of the $1 per-month private schools)
- Without taking self-selection into account (from Desai et al.)
But do private schools offer better education?

**Fig. 4. Distribution of Reading Skill by School Type**

- **Can not read**:
  - Government: 12
  - Private: 5
- **Letters**:
  - Government: 15
  - Private: 11
- **Words**:
  - Government: 24
  - Private: 16
- **Paragraph**:
  - Government: 22
  - Private: 22
- **Story**:
  - Government: 27
  - Private: 47

**Fig. 5. Distribution of Arithmetic Skills by School Type**

- **No Numbers**:
  - Government: 21
  - Private: 10
- **Numbers**:
  - Government: 37
  - Private: 26
- **Subtraction**:
  - Government: 24
  - Private: 31
- **Division**:
  - Government: 17
  - Private: 34
Controlling for Selection into private schools

- Educated, higher-income parents send their children to private schools
- Using family fixed effects the private school effect:
  - \(+0.31^{***}\) for reading skills
  - \(+0.22^{***}\) for arithmetic skills
- There is probably some self-selection in that since, as we saw, parents discriminate
- Comparable to the Rajasthan incentive study (the benefit of pure attendance)
On the other hand

- Adding a high school educated teacher’s aid with one week’s training in Mumbai and Vadodara schools lead to a 1 standard deviation improvement in reading of those who could not read.
- Similar huge magnitudes in Jaunpur.
- Also, the effect of summer camps in Bihar.
- In other words, private school teaching is much less effective, at least in improving the performance of the weakest children, than these often brief interventions by motivated but poorly trained teachers.
What could be going on: some hypotheses

- The universally shared (private schools/public schools) pedagogy is grossly inappropriate
- Based on covering material rather than generating learning
- May be the right response for the teachers given that parents believe it is a lottery, where the only point is to win the jackpot of clearing public exams
- And that there is no other assessment of performance than these public exams
- Everyone colludes on the assumption that most children have no chance of getting there
What is to be done?

- Change pedagogy: focus on integrating the various Pratham innovations, for example, into regular teaching.
- This is what Pratham is trying to do all over India: two ongoing experiments in Uttarakand and Bihar.
- Tracking: In an environment where teachers are focused on getting through material, tracking can help.
  - Duflo, Dupas and Kremer found a 0.14 standard deviation gain from baseline test score based tracking in Kenya.
What more

- Change incentives: create more proximate goals that teachers can hit rather than focus on one public exam
- Change parental perceptions: Trials in Dominican Republic and Madagascar that gave parents information on the average returns on education increased test scores
  - 0.2 standard deviation gains overall in Madagascar, 0.4 among those parents who underestimate returns
  - Child attendance went up by 3.5 percentage points on average