Education in Pakistan: What works to improve learning outcomes?

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LEAPS
Learning and Educational Achievement in Pakistan Schools

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Today’s Agenda

- What is LEAPS?

- What does LEAPS tell us?
  - Key findings that continue to inform our work

- Overview of our current work
  - Deep dive into unconditional grants study
Between 2000 and 2015 enrollment in primary school increased from 74% to 93% of school-aged children. (Unesco, 2017)

Enrollment is up – GER in 2015 was 93%
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Learning & Educational Achievement in Pakistan Schools

3 Districts in Punjab Province
12th largest schooling system in the world

- 112 villages
- 800 schools
- 1,800 households
- 5,000 teachers
- 12,000 students


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Asim Khwaja (HKS)
Tahir Andrabi (Pomona College)
Jishnu Das (World Bank)
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Education is an Active Marketplace

- Dynamic Marketplace: The typical village in the LEAPS sample has 8 schools.

- Rise of Low Cost Private Schools in Punjab alone:
  - 32,000 in 1990
  - 47,000 in 2005
  - 60,000 in 2016 (source: PMIU)

- 40% of primary enrollment is in private schools

- Even among the poorest households, nearly 1 of every 5 parents is paying for private school where the option exists.

- Pakistani parents are highly motivated to invest in children’s education.
Distance is Critical

- Girls living 500 meters away from a school are **15 percentage points** less likely to attend than those living next door.

- The drop-off is much smaller for boys - distance to school accounts for the bulk of the gender differential in enrollment in Pakistan.
What do Low Cost Private Schools Look Like?

LCPS are very cheap; teacher wages are very low.
Private School Test Scores are Higher

The gap in learning outcomes between private & public schools is 8 – 18 times the gap between socioeconomic backgrounds
Pakistan Faces a Learning Crisis

A child who drops out in Grade 3, will most likely not be functionally literate or able to do basic arithmetic.
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Central Question

How can we improve learning outcomes?

- Common approach: input augmentation

Our Theory of Change: More of the same is not going to work. **We need innovation to improve quality.**

- Instead of innovating *for* others and prescribing specific solutions, we move beyond individual inputs to explore:

1. What system level obstacles are impeding innovation and preventing education quality from improving?

2. How can we address these obstacles and catalyze the education ecosystem?
Parents and students choose price-quality menu allowing schools to allocate investments accordingly – higher quality schools can charge for more resources (public from the government, private from school fees).

Parents and students

High quality & motivated teachers improve learning outcomes.

Teacher labor market

Supply, selection, training, retention

Teacher labor market

Attractive teaching options increase demand for and returns to education; students today become teachers tomorrow.

Public organizations regulate, test and disseminate information to facilitate choice.

Private & NGO players offer credible innovations and quality enhancements. Financial institutions allow schools to undertake quality innovations that parents can pay for over time.

Offer higher quality education, increased choice – leads to informed decision making & improved longer-term student outcomes.

System intermediaries


Spillover

Public schools

Private schools

Schools provide local employment options, especially for women.

Intermediate service schools and help raise learning outcomes.

Education system intermediaries

Increasing supply of teachers lowers school costs, raising teacher quality and retention and increasing school quality.

System failures:

1. Information
2. Financial Resources
3. ESS access
4. Teacher constraints
5. School management
System Approach: Market Failures

*Given that education is an active marketplace, what market failures / system level frictions exist that constrain education quality?*

Research agenda is based on the SEE model:

- **Scope (identify frictions):** Qualitative and quantitative research to scope out a potential market failure

- **Experiment (test ways to remove them):** Use existing data or our own experiments to design an intervention that “alleviates” the market failure

- **Evaluate:** Evaluate the effect of the intervention on a broad range of outcomes
Core Research

- Labor Market Failures
- Information Asymmetries
- Lack of Access to Finance
- Knowledge & Innovation Failures
Labor Market Failures

Purpose: Examine returns to investments in education, and explore failures in teacher labor markets.

1. Returns to Education - LEAPS longitudinal follow-up Study
   - Examine the impact of schooling on early adult labor force outcomes, occupational choice and family formation.

2. Do teacher salaries impact learning outcomes?
   - Use existing LEAPS data to create teacher value added (TVA) models and analyze the relationship between wages & TVA in public & private sectors.

3. Can appraisal systems help retain high quality teachers?
   - Examine the effects of teacher appraisal systems on teacher selection, retention, and evaluation in partnership with a large private school system.
Information Asymmetries

**Purpose:** Explore where information creates a demand for quality from parents, to which schools respond.

Theory: Better information will allow parents to choose schools based on their quality (and price) and in turn, schools are incentivized to invest in quality enhancements.

**Report Cards Study**
Examine impact of providing report cards for both students and schools to parents in villages

- Compare performance of 7-8 schools per village
- Plan to go back and look at the impact of information provision 12 years later
Findings from Report Cards Study

- Learning outcomes improved – by an average of 42% more in treatment villages

- Learning outcomes in public schools improved – by 0.11 standard deviations

- Private schools lowered their fees – by 17%

- Enrolment increased – by 3 percentage points (about 40 children per village)

- The worst-performing schools went out of business - students shifted to other schools
Purpose: Examine the ability to provide the resource and financing that increases access to the tools needed by public and private schools to innovate and grow.

1. Grants to Public Schools
   ▶ In progress

2. Grants to Private Schools
   ▶ Niha to present in detail

3. Education Financing Study
   ▶ Study how two new financial products (loan & equity), designed in collaboration with a partner MFI, affect financial performance, enrollment and learning among low cost private schools
Purpose: Examine the ability to catalyze the knowledge and innovation markets that lead to mature markets for educational support services (ESS).

ESS Study

- Examine what factors limit development and adoption of innovative ideas in the educational space
- Determine to what extent access to such services helps foster better learning outcomes in the educational sector
- Organize trade fairs or ‘melas’ to link sample schools with vetted education support service providers