



UNIVERSITY OF  
**OXFORD**

**Young Lives**   
An International Study of Childhood Poverty



## Home and School Disadvantage and How Children Learn: Are Some Education Systems More Equal Than Others?

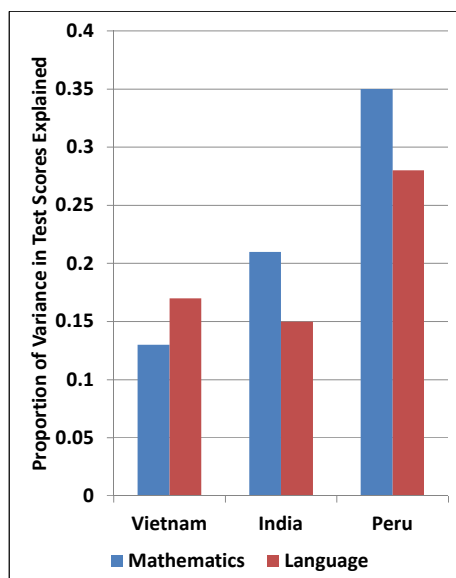
Caine Rolleston



## DO SCHOOLS MATTER AND FOR WHOM?

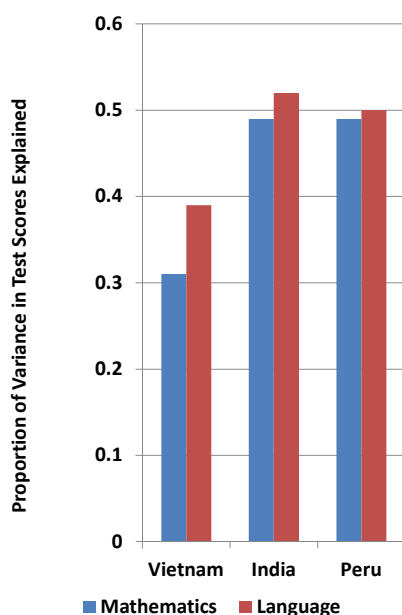
- Increased focus on actual learning (not only enrolment) and on school quality processes (not only inputs) requires more and better education metrics in developing countries
- Because the relationships between education and poverty operate through mechanisms at the child, household, community and school levels ideally linked data across these levels is required, but is rarely available in developing countries
- Young Lives household plus school surveys provide unique linked panel data which permit analyses of education questions which take full account of children's backgrounds and which permit analysis of 'value-added' by schools and teachers ('school effectiveness')
- Despite a large number of studies of the effects of observable school inputs, there is little consistent evidence on 'what works' in terms of individual school inputs
- Glewwe, Hanuhek et al (2011) review 79 high quality studies and find the effects of most school and teacher characteristics are statistically insignificant and the few that are "are not particularly surprising and thus provide little guidance for future policies and programs"
- However, differences in attainment between schools and between school-systems often remain large even when children's backgrounds are accounted for - while schools matter, what matters in particular is likely dependent on systems of interacting inputs (e.g. in India we find better qualified public school teachers are much more likely to be absent)
- We examine the question of how much schools matter (compared to home backgrounds) and for whom in the contexts of India, Peru and Vietnam (awaiting data from Ethiopia) and consider what this means for equality of opportunity in these school systems

### CHILDREN'S HOME BACKGROUNDS ARE POWERFUL PREDICTORS OF ATTAINMENT AT AGE 11 IN PERU BUT PLAY A RELATIVELY SMALL ROLE IN VIETNAM

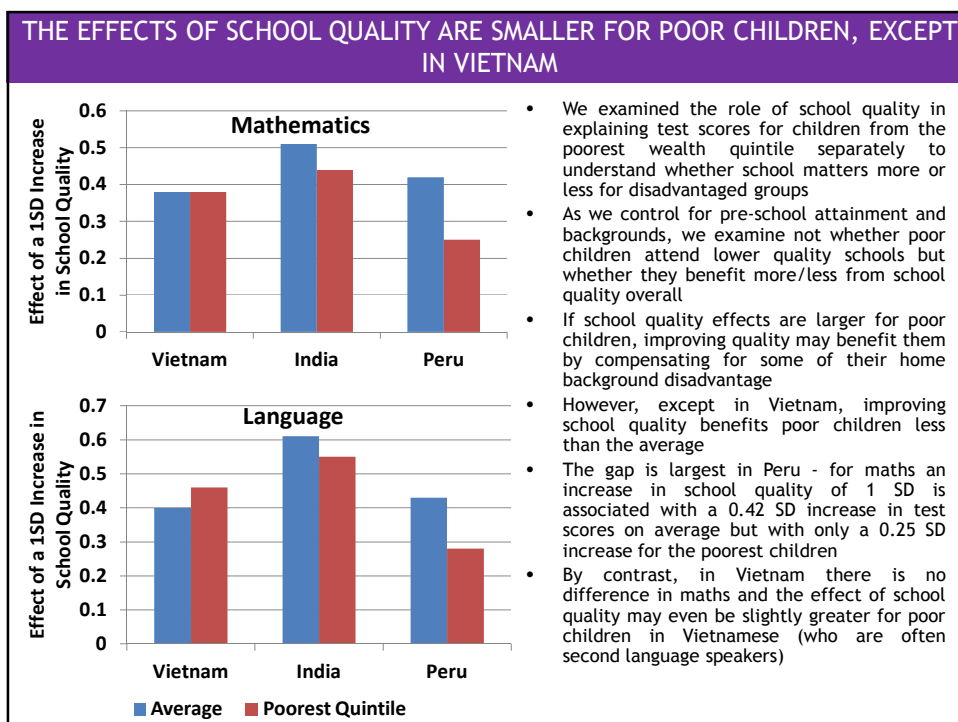


- By linking the household panels and school surveys we are able to control for children's cognitive development prior to enrolling in school (at age 5), addressing the issue of 'selection into schools'
- Controlling for pre-school scores, children's home backgrounds (at age 5) explain much more of the variation in test scores (at age 11) in Peru than in Vietnam or India
- In maths especially, backgrounds account for a large proportion of the variance in Peru and a small proportion in Vietnam
- Key background factors include nutrition, parental education, minority status, gender (India) pre-schooling (Peru) and wealth (but not in Vietnam)
- Systems where background effects are large are more inequitable since they 'reproduce' advantage/disadvantage

### SCHOOLS ARE A POWERFUL PREDICTOR OF ATTAINMENT AT AGE 11 IN INDIA AND PERU COMPARED WITH VIETNAM



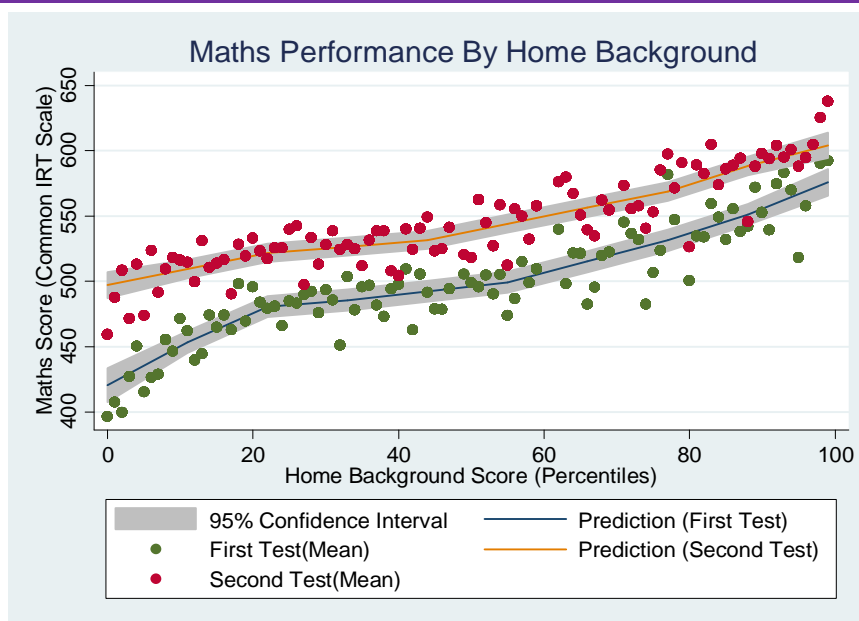
- In line with the literature, observed school characteristics explain relatively little of the variation in pupil test scores in YL data (up to 19% (in Vietnam))
- We use 'school fixed effects' to capture all school-level factors (school quality), controlling for pupil backgrounds, pre-school cognitive scores and peer-group composition and find **schools do matter strongly beyond the selection of pupils that attend them**, explaining up to half of the variation in scores
- School quality in India and Peru accounts for notably more of the variance in test scores than schools in Vietnam, with the difference being larger in maths
- Systems in which school quality differences explain a large proportion of variation in achievement controlling for backgrounds are more heterogeneous (India and Peru) and in these systems the school a child attends matters more, but potentially there is scope for policy learning from higher quality schools



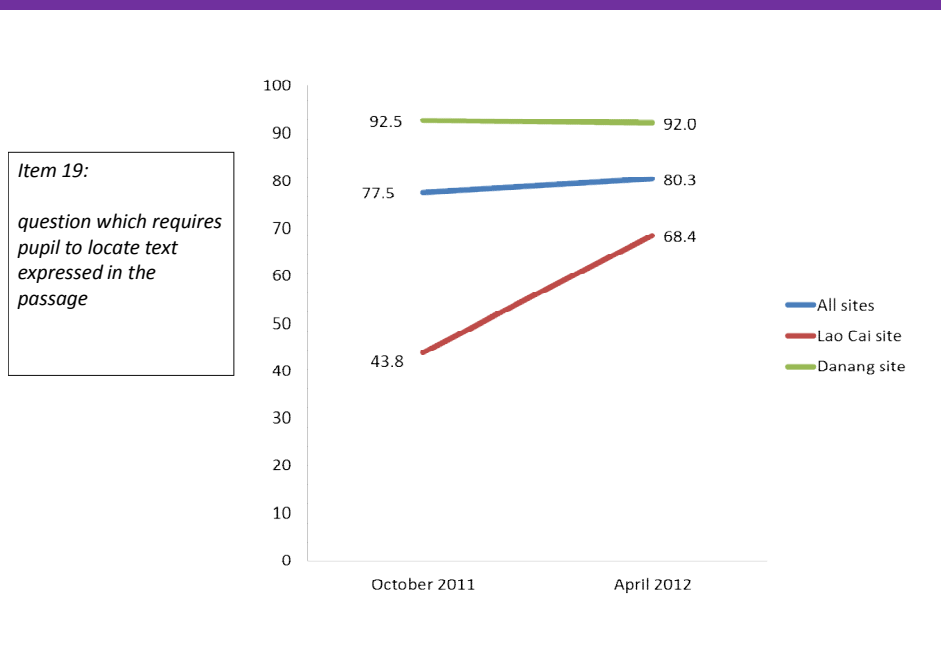
### ARE SCHOOLS ELITIST? WHAT IS DIFFERENT ABOUT VIETNAM?

- Consistent with our findings for India and Peru, Banerjee and Duflo (2011) argue that poor children in developing countries often benefit less from schooling and that where this is so, schooling is 'elitist' and wasteful of potential. They may benefit less because
- (1) They access poorer quality schools (e.g. lower quality and more absent teachers in rural areas in India) but
- (2) Schools and teachers (and even parents) focus on better performing pupils - e.g. because the curriculum and teacher training/incentives are geared to them leading to unrealistic expectations and 'giving up' on weaker pupils
- They propose that a strong focus on basic skills/competencies and a commitment to mastery by all pupils including through use of regular assessment would allow schools to better serve the pupils they actually contain
- We examine what the early evidence from YL in India and Vietnam shows on these issues
- Vietnamese policies (in a highly centralised system) reflect some of these concerns - emphasising 'fundamental' or minimum school quality levels (especially in disadvantaged areas). Also, YL data shows that teacher knowledge in relation to the curriculum is similar between more and less disadvantaged areas, absenteeism is low across schools and that common text books are in use which are matched fairly closely to pupils' learning levels

IN VIETNAM WE TESTED PUPILS AT THE BEGINNING AND END OF THE SCHOOL YEAR AND FOUND PROGRESS IS EQUITABLE ACROSS THE RANGE OF BACKGROUNDS



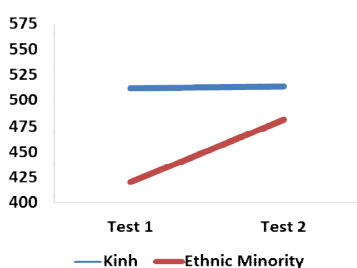
IN VIETNAM THERE IS EVIDENCE OF A FOCUS ON 'MASTERY' - PUPILS IN DISADVANTAGED AREAS 'CATCH-UP' ON SIMPLER TEST ITEMS - E.G. IN VIETNAMESE READING



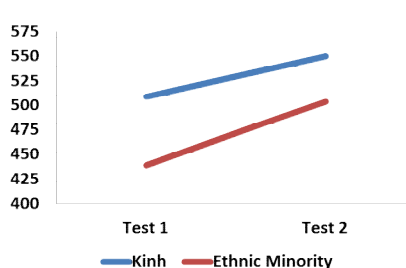
**IN VIETNAM, ETHNIC MINORITY PUPILS PERFORM MUCH LESS WELL THAN KINH, BUT WE DO NOT FIND EVIDENCE THAT THE GAP WIDENS DUE TO SCHOOLING**

	Maths			Vietnamese		
	First Test	Second Test	Gain	First Test	Second Test	Gain
Kinh	508.74	549.77	41.03	511.41	513.32	1.90
Ethnic Minority	438.55	503.66	65.12	419.76	481.31	61.55
Difference	70.19***	46.11***	24.08***	91.65***	32.01***	59.65***
Total	500.00	544.03	44.03	500.00	509.33	9.33

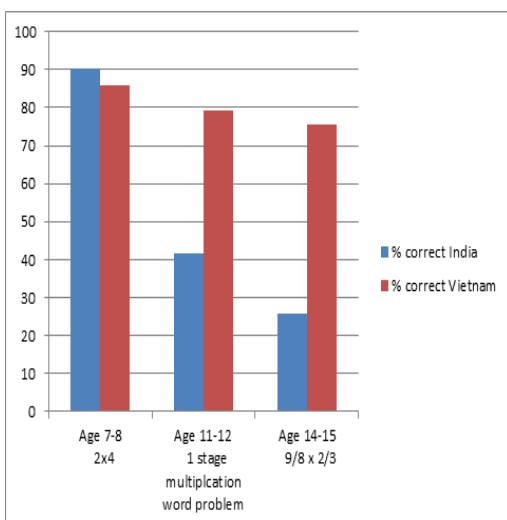
**Vietnamese**



**Mathematics**



**WHILE PUPILS IN VIETNAM KEEP UP WITH THE CURRICULUM, IN INDIA THEY FALL PROGRESSIVELY BEHIND**



- In preliminary work (joint with Lant Pritchett) we compare achievement on age-appropriate maths items which pupils 'should' be able to answer correctly according to curricular expectations
- In Vietnam, a majority of pupils are typically able to answer the relevant items at the ages of 7-8 and again at 11-12 and 14-15
- But in India, although pupils master the lowest level items at age 7-8, there is dramatic 'drop-off' at age 11-12 and again at age 14-15 (2013 ASER report shows cross-sectional decline over time)
- Pupils abilities remain in-line with the curriculum in Vietnam but the curriculum in India is progressively 'over-ambitious' (pupils fail to progress in line with expectations)

## WORK IN PROGRESS

- Improving school quality is important but ensuring disadvantaged pupils benefit is a central concern in many systems. The system in Vietnam stands out from those in India and Peru and comparative studies offer scope for policy learning on what works for disadvantaged pupils.
- On-going research in education at YL includes a focus on:
  - School effectiveness (school and teacher value-added) including differential effectiveness for disadvantaged groups
  - The role of (overambitious or appropriate) curricular expectations for pupil learning progress (with Lant Pritchett)
  - Private school choice, effectiveness and implications for equity (with OSI Private Education Research Initiative)
  - The impact of home and school inequalities on learning and poverty outcomes (with Paul Glewwe)
  - The role of ‘peer effects’ and peer grouping in raising achievement
  - The role played by schools in developing ‘non-cognitive skills’ and the benefits for pupil achievement

## FINDING OUT MORE...

[www.younglives.org.uk](http://www.younglives.org.uk)

- methodology
- datasets (ESDS International)
- publications
- child profiles and photos
- e-newsletter

