



UNIVERSITY OF
OXFORD

Young Lives 
An International Study of Childhood Poverty

Who Benefits from Value-Added? School Effectiveness in Vietnam

Caine Rolleston

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THE VIETNAMESE SUCCESS STORY

- Since *Doi Moi* (renovation)(1986) Vietnam has been one of the fastest growing economies in the world
- Inclusive growth, at least until very recent years (poverty reduction from 58% to 16% 1993-2006)
- Strong improvements in education e.g. reduction from 23% to 1% in population with no schooling since 1992
- Falling birth rate and achievement of 'correct age for grade' enrolment has provided an opportunity to focus on improving quality in primary education

THE VIETNAMESE SUCCESS STORY

- Standards in mathematics and reading probably compare with those of many much richer countries (e.g. Hong Kong, New Zealand, Greece) (World Bank)
- This is despite continuing challenges of school infrastructure, low teacher salaries and the lowest number of instructional hours in the region
- Improvements focused on a 'minimum standards' (Fundamental School Quality Levels) approach
- But important disparities exist between more and less advantaged provinces, urban and rural areas and especially between Kinh and ethnic minorities

THE SCHOOL SURVEY IN VIETNAM



Objective: Assessing learning & progress of Grade 5 pupils in Maths and Vietnamese

- 20 sentinel sites across five provinces
- Link to school and home backgrounds collected since 2002
- Longitudinal test and retest design – Autumn 2011 & Summer 2012
- Allows measurement of change while school and class factors are fixed

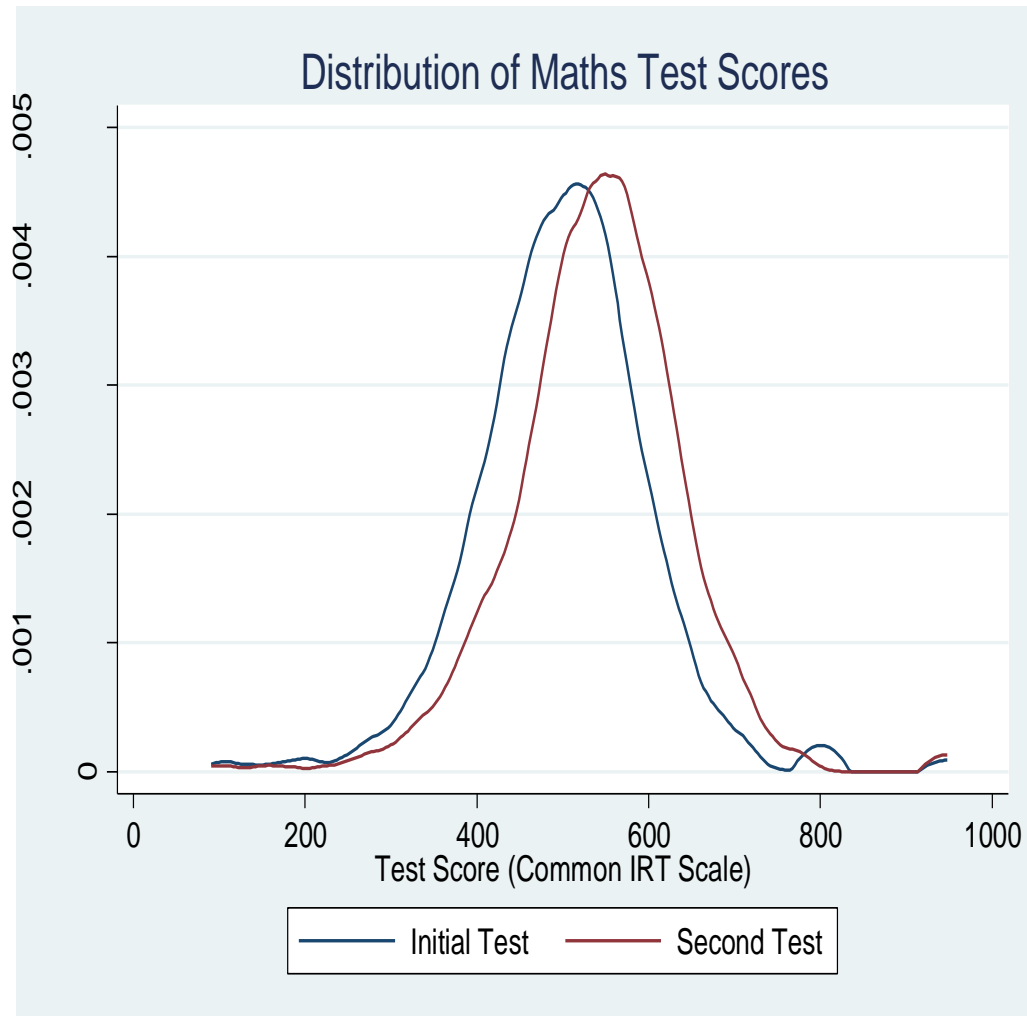
STUDY DESIGN

- YL Younger Cohort pupils (age 10-11) and their class peers
- 3284 Grade 5 pupils, 176 classes in 91 school sites
- Measures of children's learning in Maths and Vietnamese
- Tests of teacher pedagogical content knowledge in Maths and Vietnamese
- Background and test data on YL child's class peers
- Observation of school facilities & classroom resources
- School principal questionnaire
- Teacher questionnaire including attitudes

CURRICULAR TESTS

- Reflect **curricular expectations** at the beginning and the end of the school year
- Developed in consultation with curriculum experts in line with MoET/WB Grade 5 study
- 30 multiple-choice questions
- Common anchor items on both tests to allow linking on a single scale using **Item Response Theory (IRT)**
- This enables **longitudinal measurement** of learning progress via **vertical scaling**

Progress in Mathematics During Grade 5



- We scaled the test scores to have a mean of 500 and a standard deviation of 100
- Pupils on average made 41 points progress during Grade 5
- We use the progress made to examine the 'value-added' by schools and teachers



SOME DESCRIPTIVE FINDINGS

ACHIEVEMENT OVERALL IS HIGH AT AGE 10, ESPECIALLY IN MATHS

18. Calculate:

$$\frac{3}{5} - \frac{1}{3} = \dots\dots\dots$$

A. $\frac{2}{5}$

B. $\frac{2}{2}$

C. $\frac{2}{15}$

D. $\frac{4}{15}$

81%

16. Calculate x in the following equation:

$$x + \frac{4}{5} = \frac{3}{2}$$

A. $\frac{1}{10}$

B. $\frac{6}{5}$

C. $\frac{7}{7}$

D. $\frac{7}{10}$

84%

PUPILS' BACKGROUNDS AND OPPORTUNITIES TO LEARN

- 12% ethnic minorities (nationally 13%)
- 6% overage pupils (as in MoET/WB study)
- Large differences in home background advantage between sites
- Large differences in achievement between the most (urban Da Nang) and least advantaged sites (mountainous Lao Cai)
- Notable differences in test score by ethnicity (Kinh/minority)

BUT

- No stark differences in access to basic learning materials
- Pupils from disadvantaged sites and from disadvantaged backgrounds often made **good progress** on the curriculum so that gaps in curricular knowledge narrowed during the school year

SCHOOLS, CLASSES, TEACHERS QUALITY INDICATORS

- Almost all schools have basic facilities including electricity, toilets etc.
- But larger differences on other types of school resources (i.e. library, internet, computers), particularly between Da Nang and the other sites
- Class resources and class size increase with the average levels of children's background advantage
- Pupils in more advantaged sites receive more periods of teaching per week
- Teachers with slightly higher scores in Maths and Vietnamese are more likely to have a university degree and to teach in sites that are more advantaged
- **But overall differences across sites on many key quality indicators tend to be small and except when comparing the extremes – focus on minimum standards may explain this**



SCHOOL EFFECTIVENESS OR 'VALUE ADDED' IN GRADE 5



VALUE ADDED ANALYSIS



Value added: Learning progress attributable to schools and teachers after removing prior attainment and background effects.

VA analysis does not focus on the absolute levels of attainment, but on how much students have improved during the school year, whatever their initial learning levels were.

SCHOOL VALUE ADDED

SCHOOL VALUE ADDED: summary measure of 'school quality'

- It provides a measure of the difference made at the school level over the period between the two tests
- Can be computed in two different ways:

Difference between pupils' actual end of the year scores and their 'expected scores' based on the whole sample aggregated at the school level

Through regression modelling by taking account of:

- prior scores in both subjects
- home backgrounds

(CONTEXTUAL VA)

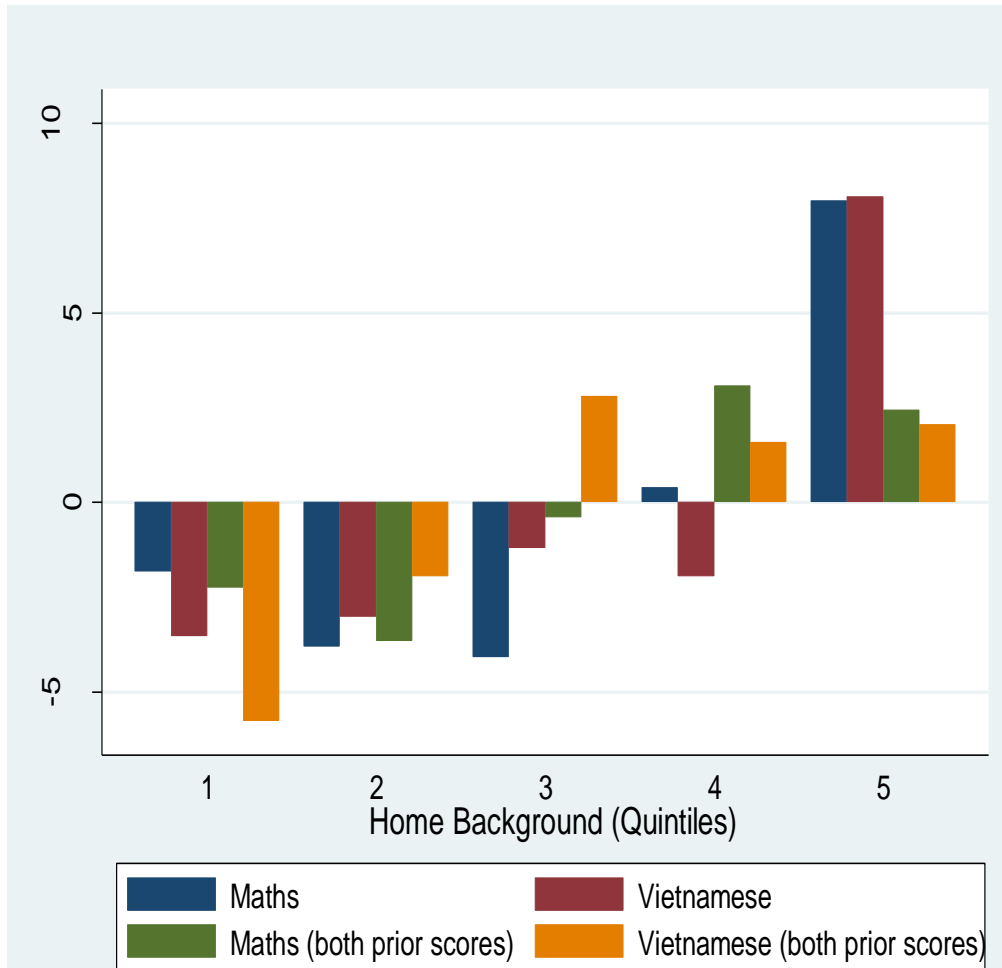
This method takes into account the potential greater difficulties in 'adding value' to more disadvantaged pupils' learning

WHY SHOULD WE FOCUS ON PROGRESS/VALUE-ADDED?

	Vietnamese 2011	Vietnamese 2012	Vietnamese Value-Added
Male	-20.3524	-19.3315	-12.6761
	(-6.835)***	(-6.538)***	(-5.100)***
Ethnic minority	-17.6592	-7.1008	0.2911
	(-1.907)*	(-0.809)	(0.042)
R-squared	0.07	0.06	0.25

- **Value added analysis produces different findings to cross-sectional research**
- **For example ethnic minority pupils do not ‘learn less’ in Grade 5 – when we account for prior scores**
- **This suggests the ‘gap’ in test scores is the result of influences earlier in life**

TO WHAT EXTENT DOES HOME BACKGROUND INFLUENCE PROGRESS THROUGHOUT THE SCHOOL YEAR?

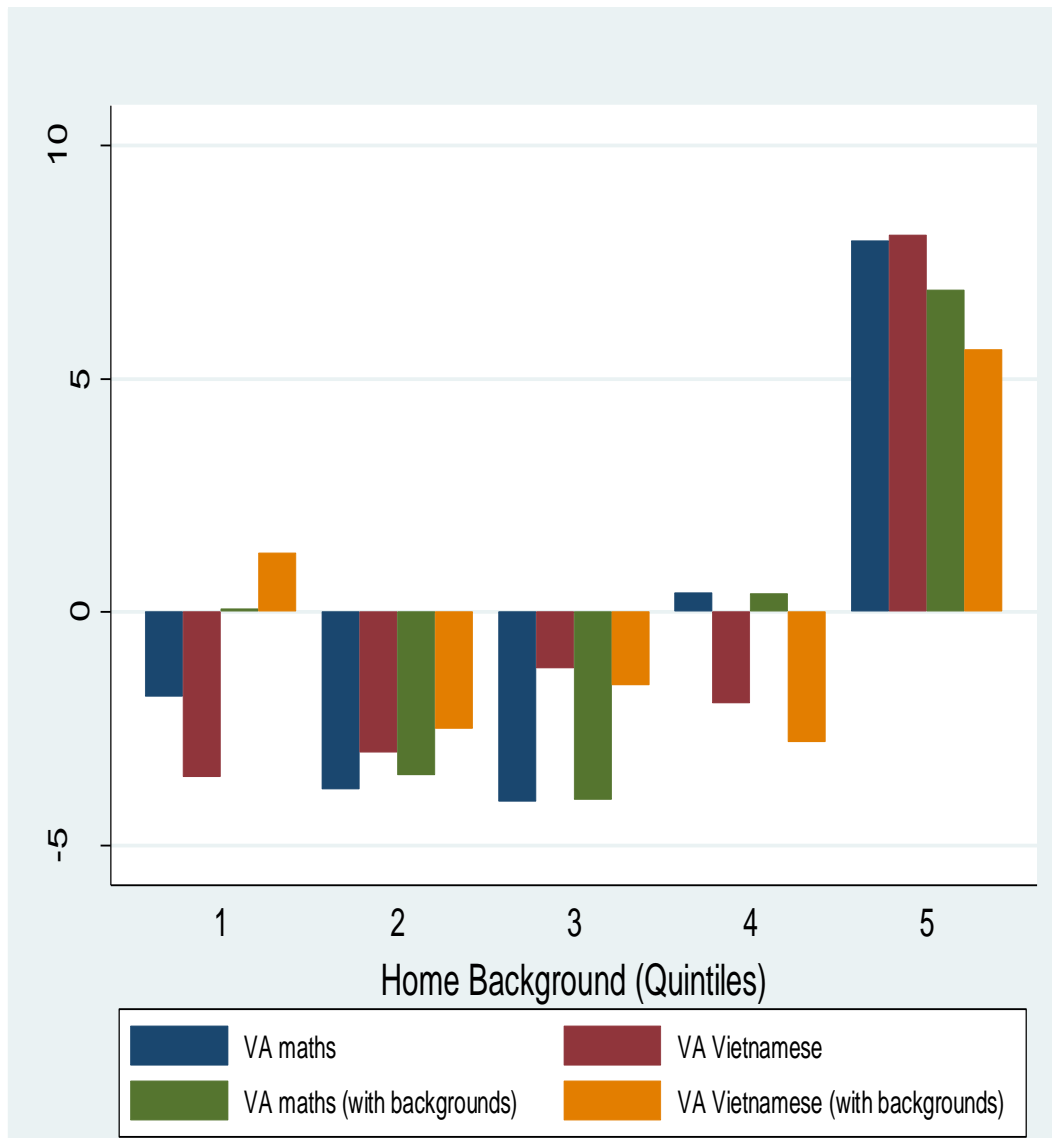


Differences between:

- Expected test scores based on whole sample and actual end of the year scores
- Most advantaged pupils achieve higher than expected scores
- Students in least advantaged groups achieved lower than expected scores
- But, the differences are small (compared to the mean of 500 on the first test)

HOME BACKGROUND ADVANTAGE PLAYS A RELATIVELY SMALL ROLE IN EXPLAINING PUPILS' PROGRESS IN MATHS AND VIETNAMESE DURING GRADE 5.

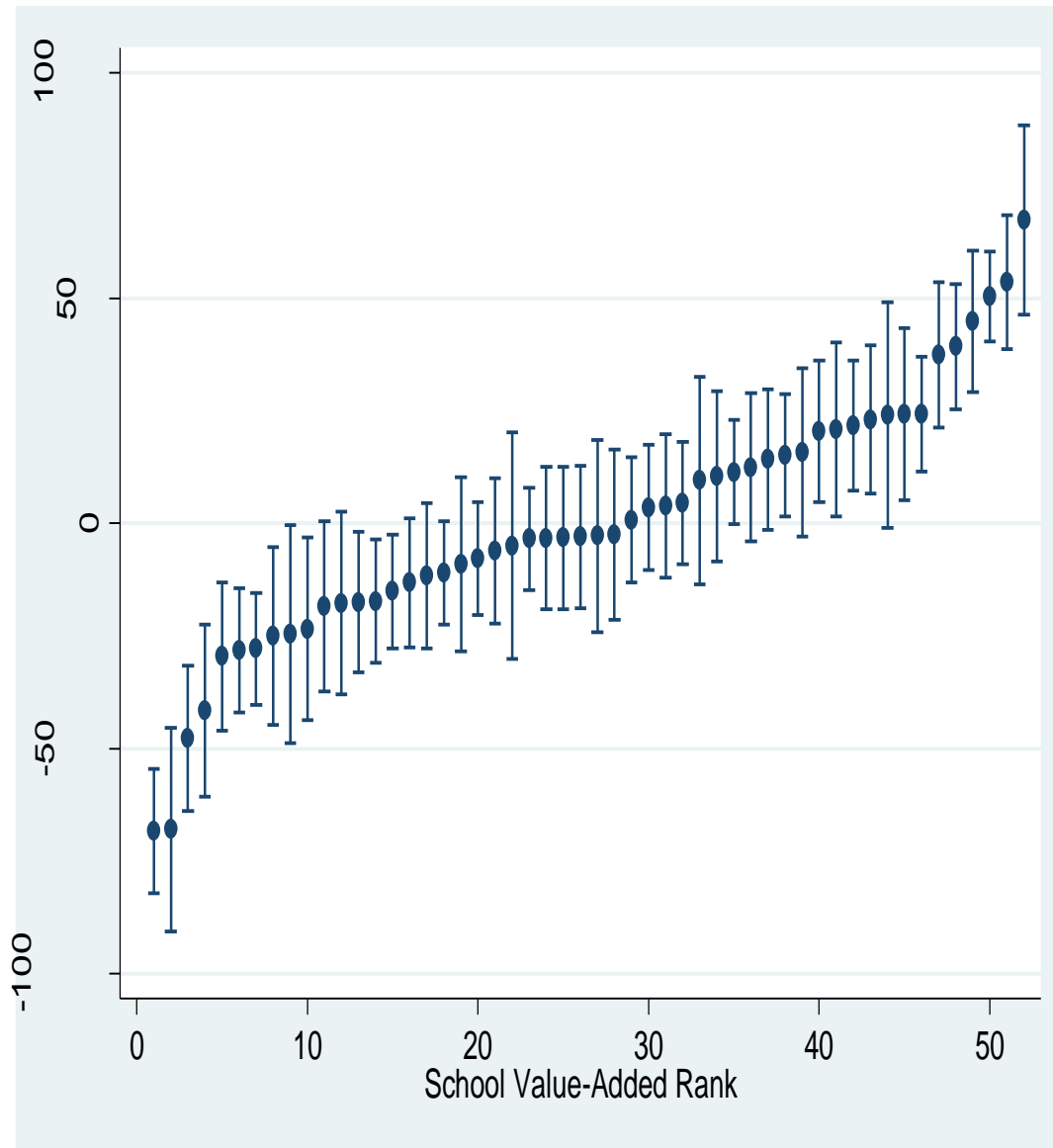
NO STARK DIFFERENCES IN SCHOOL VA BY HOME BACKGROUND



- More advantaged pupils on average benefit from slightly higher levels of school VA, or attend higher quality schools.
- However, the differences are small, especially when their home backgrounds are taken into account in the VA estimate

The evidence that more disadvantaged pupils are 'sorted' into lower quality schools is weak in Vietnam

YET NOTABLE DIFFERENCES IN SCHOOL VA ARE FOUND BETWEEN SCHOOLS IN THE SAMPLE



- Estimates of VA with prior score only
- Substantial differences between the top and bottom performing schools in terms of VA (up to 100 or more points or two years' learning)

School quality variation is important in determining learning in Maths and Vietnamese during Grade 5

ARE THERE OBSERVABLE SCHOOL-LEVEL CHARACTERISTICS THAT ARE ASSOCIATED WITH SCHOOL QUALITY?

- High performing schools do have slightly better facilities on some indicators,
 - Separate Grade 5 classrooms
 - Working electricity
 - Higher proportion of teachers qualified to degree level
 - Schools less likely to admit all pupils who apply (often use residence criteria)

BUT

- Some of the highest performing schools are attended by a larger proportions of ethnic minorities
- 6 out of 9 highest performing schools served pupils with greater than average home disadvantage

CLASS-LEVEL VALUE ADDED

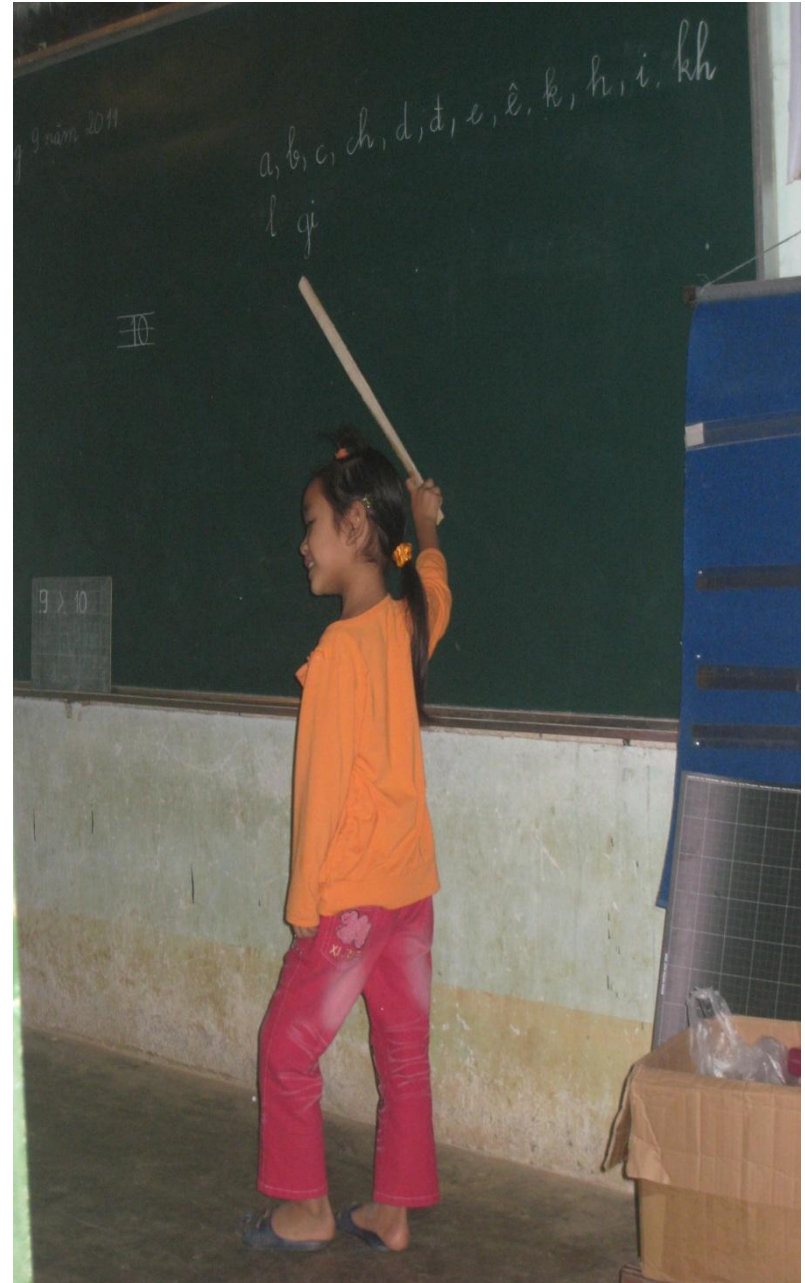
Larger sample (176 classes)

High performing classes

- Better levels of assets and facilities (for example electricity, fan, overhead projector, storage cabinets etc.)

Teachers

- More likely to have permanent contracts
- Less likely to originate from the province of the school
- Evaluated more often
- Less likely to support their incomes with second jobs
- Some attitude differences on teacher efficacy - e.g. less likely to agree with statements like “family environment is the primary influence on pupils’ learning”



CLASS-LEVEL QUALITY MATTERS

	High VA	Low VA	Significance of difference
Average Maths score (First test)	520.17	503.40	-
Average Maths score (Second test)	<i>612.03</i>	<i>496.13</i>	***
Average Vietnamese score (First test)	522.10	500.96	*
Average Vietnamese score (Second test)	<i>588.05</i>	<i>466.91</i>	***

- Differences in test scores at the beginning of the year between the high and low value-added classes are small
- But by the end of the year the gap was more than 100 points (at least two years' learning)

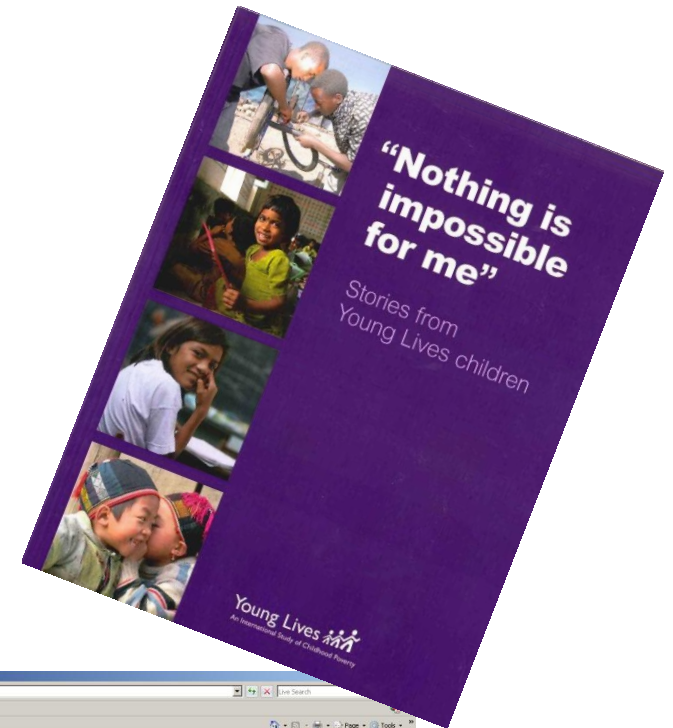
CONCLUSIONS

- Schooling *in Grade 5* in Vietnam is relatively equitable
- Disadvantaged pupils enter with lower scores but their position does not worsen and there is some 'catch-up'
- Disadvantaged pupils attend schools with lower levels of some key assets but are often in smaller classes
- The relationship between school and class quality and pupils' backgrounds is fairly weak
- There are large differences in school quality but there is little evidence that advantaged pupils benefit notably more from accessing the best schools
- Our tests focus on the Grade 5 curriculum only. Many advantaged pupils are ahead (attend extra classes etc.) – we are unable to assess the extent of this learning
- A focus on common standards in teacher training, curricula, text-books and school resources and on pupils reaching grade-specific minimum learning standards may be paying off
- Gaps at entry to Grade 5 require further efforts to equalise learning in lower grades however.

FINDING OUT MORE...

caine.rolleston@qeh.ox.ac.uk

www.younglives.org.uk



Young Lives - Mozilla Firefox

http://www.younglives.org.uk/

Young Lives
An International Study of Childhood Poverty

Young Lives is an international study of childhood poverty, involving 12,000 children in 4 countries over 15 years. It is led by a team in the Department of International Development at the University of Oxford in association with research and policy partners in the 4 study countries: Ethiopia, India, Peru and Vietnam.

Through researching different aspects of children's lives, we seek to improve policies and programmes for children.

We need to end child poverty in order to break the cycle of poverty.

Child work is common. Exploitative or dangerous work causes harm but some work can be a positive way in which children develop skills and take part in their community. Find out more at Our policy work.

1 2 3 4 5

What we do | Where we work | Our themes | What's new

Discover more about the unique multidisciplinary nature of the Young Lives project and its work

Find out more about our 4 diverse cultural, geographic, economic and political study contexts

Explore our work by themes that are central to children and young people's lives in the modern world

Young Lives Round 3 survey launch at DFID 27 September 2011

Delivering Economic Growth for Children - presentations in The Hague 26 September 2011

Young Lives features in 'Because I am a Girl' report 22 September 2011

Young Lives methods guide launched 21 September 2011

Our policy work

Research methods

Access our data

Children's voices

Ethiopia

India (Andhra Pradesh)

Peru

Vietnam

Dynamics of childhood poverty

Children's experiences of poverty

Schooling, time-use and life transitions

Cross-cutting analysis

Young Lives dataset guide - Windows Internet Explorer

http://www.esds.ac.uk/InternationalAccess/233379.asp

ESDS International

ESDS International study guide

Guide to Young Lives

The Young Lives survey is an innovative long-term project investigating the changing nature of childhood poverty in four developing countries. The purpose of the project is to improve understanding of the causes and consequences of childhood poverty and examine how policies affect children's well-being, in order to inform the development of future policy and to target child welfare interventions more effectively.

The study is being conducted in Ethiopia, India (in the Andhra Pradesh state), Peru and Vietnam. These countries were selected because they reflect a range of cultural, geographical and social contexts, and experience differing issues facing the developing world: high debt burden, emergence from conflict, and vulnerability to environmental conditions such as drought and flood.

The Young Lives study uses a range of data collection methods, both quantitative and qualitative. The study aims to follow 2,000 children (aged approximately 1 year in 2002) and their households, from both urban and rural communities, in each of the four countries (8,000 children in total) for a period of 15 years. It is envisaged that subsequent survey waves will take place once every three to four years. Data were also collected for the baseline survey from 1,000 children aged 8 years in each country, in order to provide a basis for comparison with the younger children when they reach that age.

Accessing data and documentation

Users registered with the Economic and Social Data Service (ESDS) have access to the Young Lives data in SPSS, Stata and tab-delimited formats, via the instant download service or on CD (CD orders are free of charge for users outside the UK who may have difficulty downloading the study material).

The data are available to all registered users for non-profit purposes.

To register with ESDS: www.esds.ac.uk/wandb/access/login.asp

Once registered, access to the Young Lives data is via www.esds.ac.uk/findingdata/InDescription.asp?m=3307