



**International Initiative for Impact Evaluation**

# **What do we know about what works to enhance education outcomes?**

*Plenary Session C: Enhancing Education Outcomes*

**17<sup>th</sup> Annual Global Development Conference**

**Education for Development: Quality and Inclusion for Changing Global Human Capital Needs**

**Emmanuel Jimenez**

Executive Director, 3ie

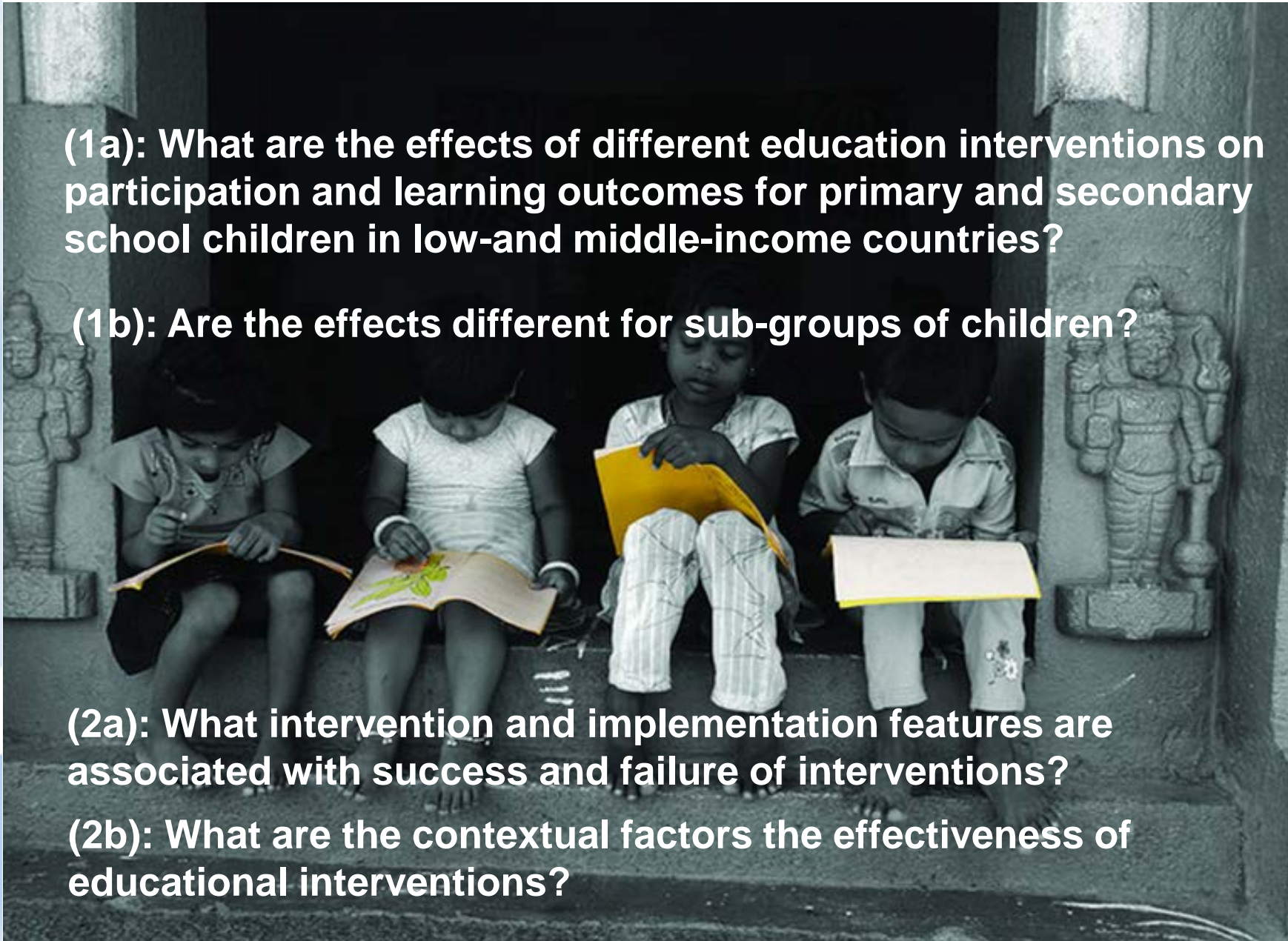
# Research questions

**(1a): What are the effects of different education interventions on participation and learning outcomes for primary and secondary school children in low-and middle-income countries?**

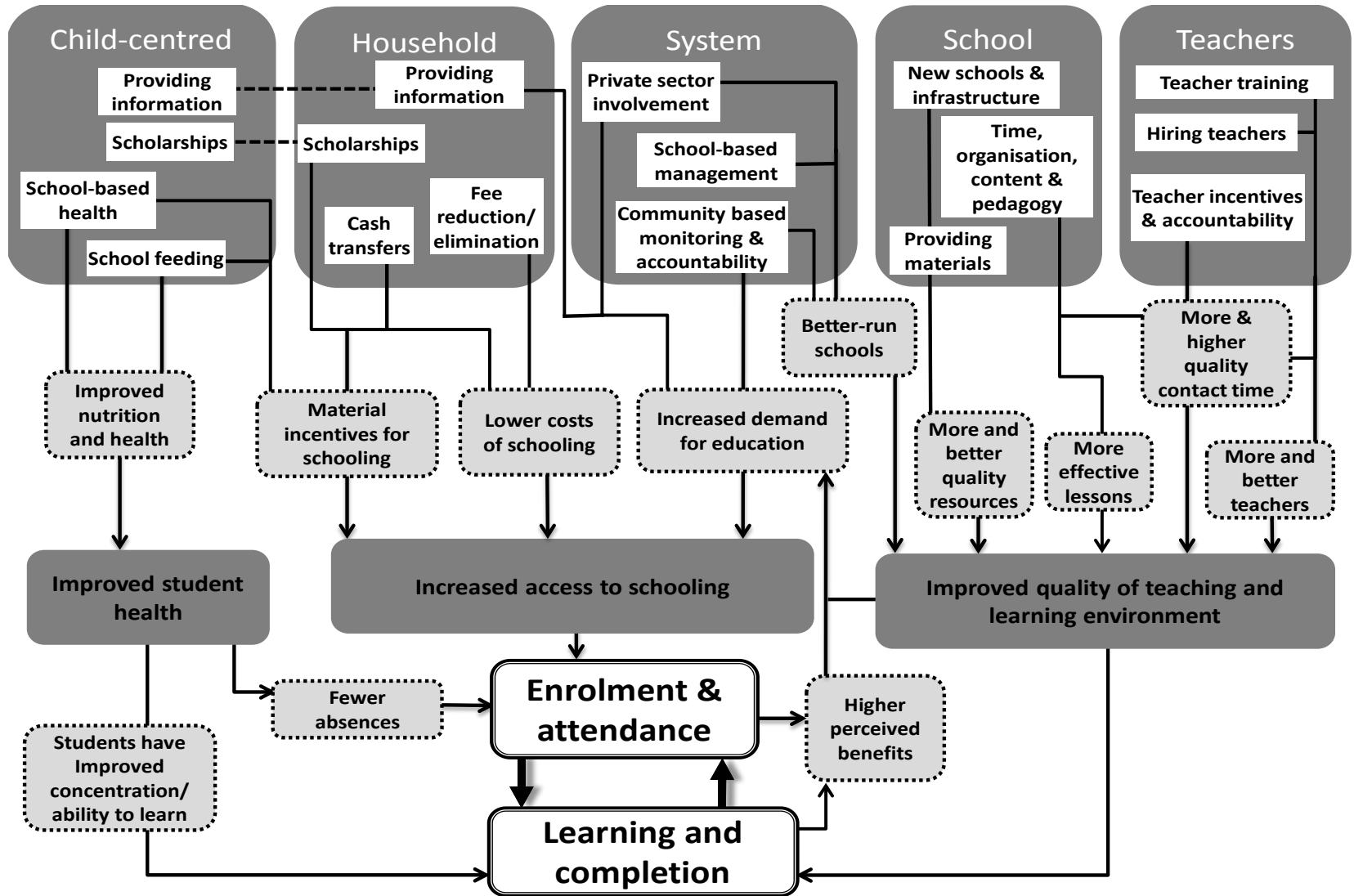
**(1b): Are the effects different for sub-groups of children?**

**(2a): What intervention and implementation features are associated with success and failure of interventions?**

**(2b): What are the contextual factors the effectiveness of educational interventions?**

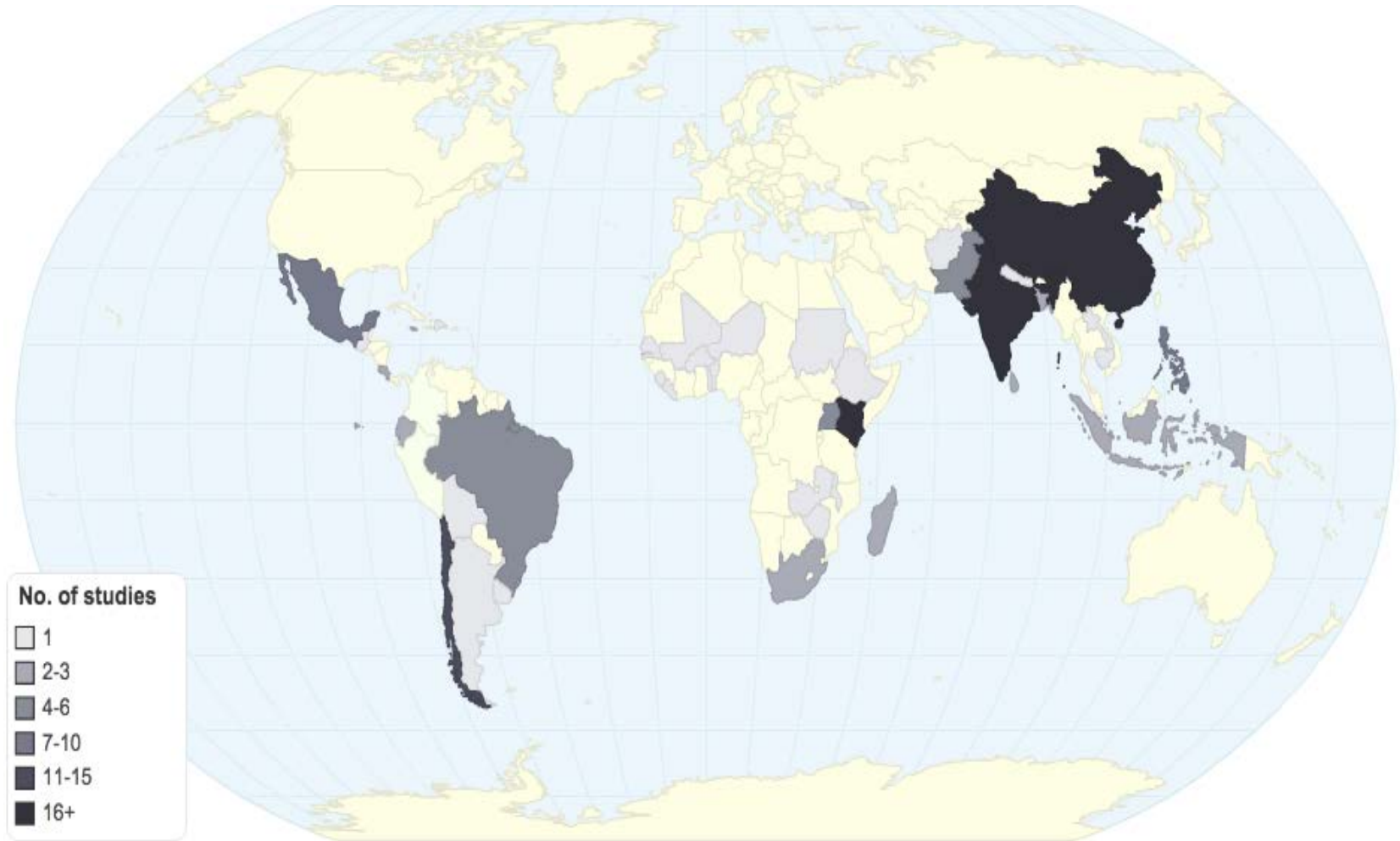


# Intervention framework



~80K records identified; ~8K abstracts selected; 2K articles read; 420 IE papers

# Geographical coverage of included studies





## Findings: High Level Results

The most consistent positive effects: cash transfers on school participation and structured pedagogy on learning

Many interventions have consistently positive but smaller effects: community based monitoring, computer assisted learning, school building, teacher training

For some interventions variance too high (including negative results) to conclude: user fees, school materials only, school based mgt, teacher incentives, deworming





## Implication: “context” of ed system crucial in applying evidence. Three examples

Readiness matters: Demand side interventions succeed if aligned with existing supply

Responsiveness matters: Accountability interventions depend on ability of providers to respond

Implementation matters as much if not more than design



# Aligning demand and supply: cash transfers (CTs)

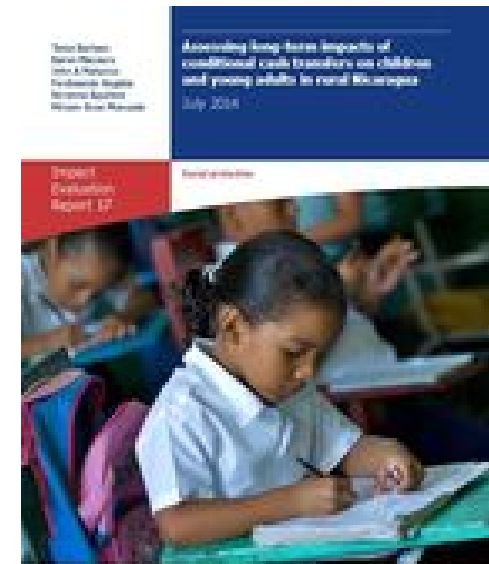
- **CTs**

- **Unconditional Cash Transfers (UCTs):** transfer unconditional grants to targeted to poor families and those with disadvantaged kids (girls)

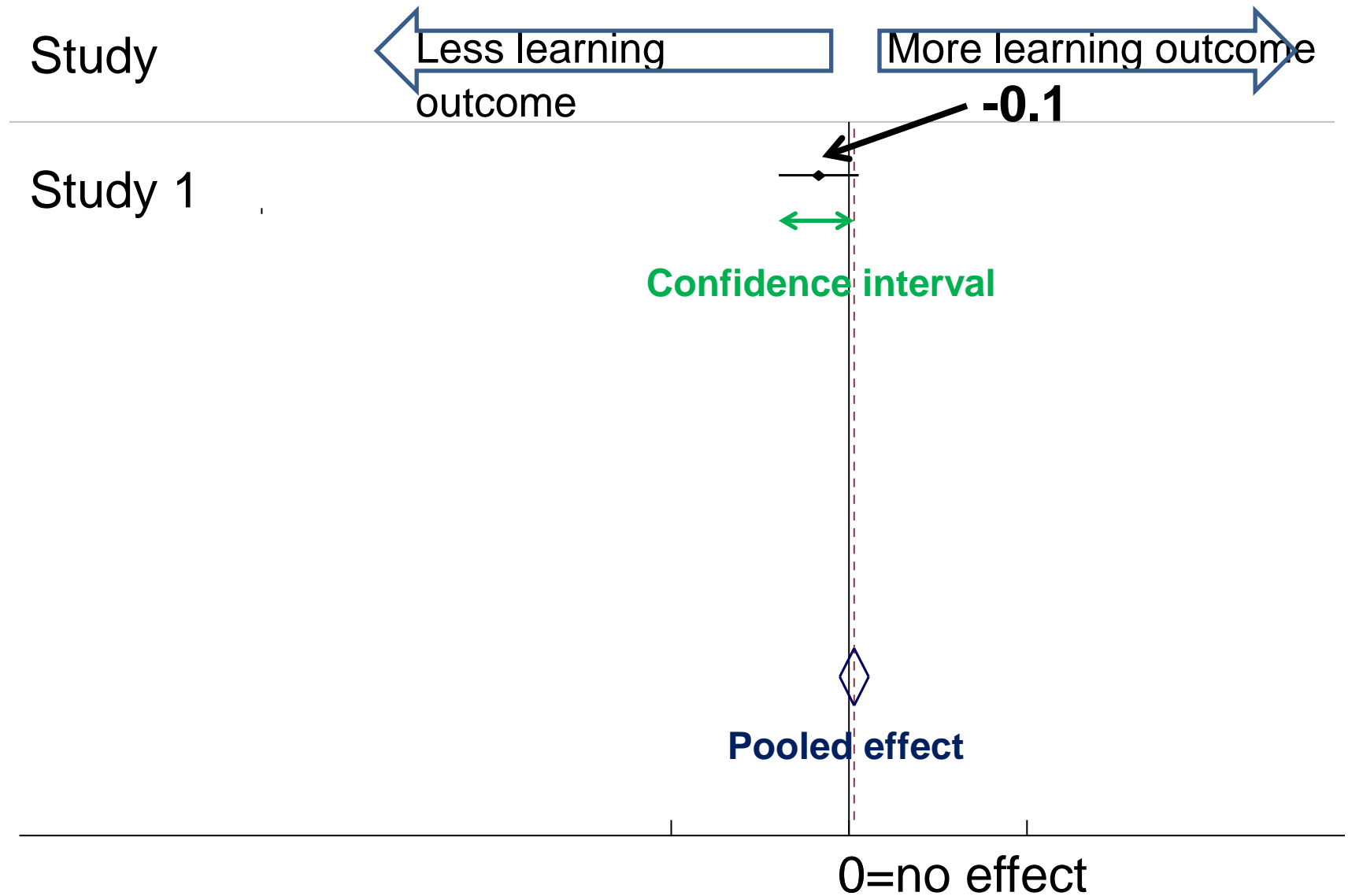
- **Conditional Cash Transfers (CCT):** transfer cash to households (or school children) conditional on their achieving certain outcomes, such as school attendance and satisfactory grades

- **Popular to study:**

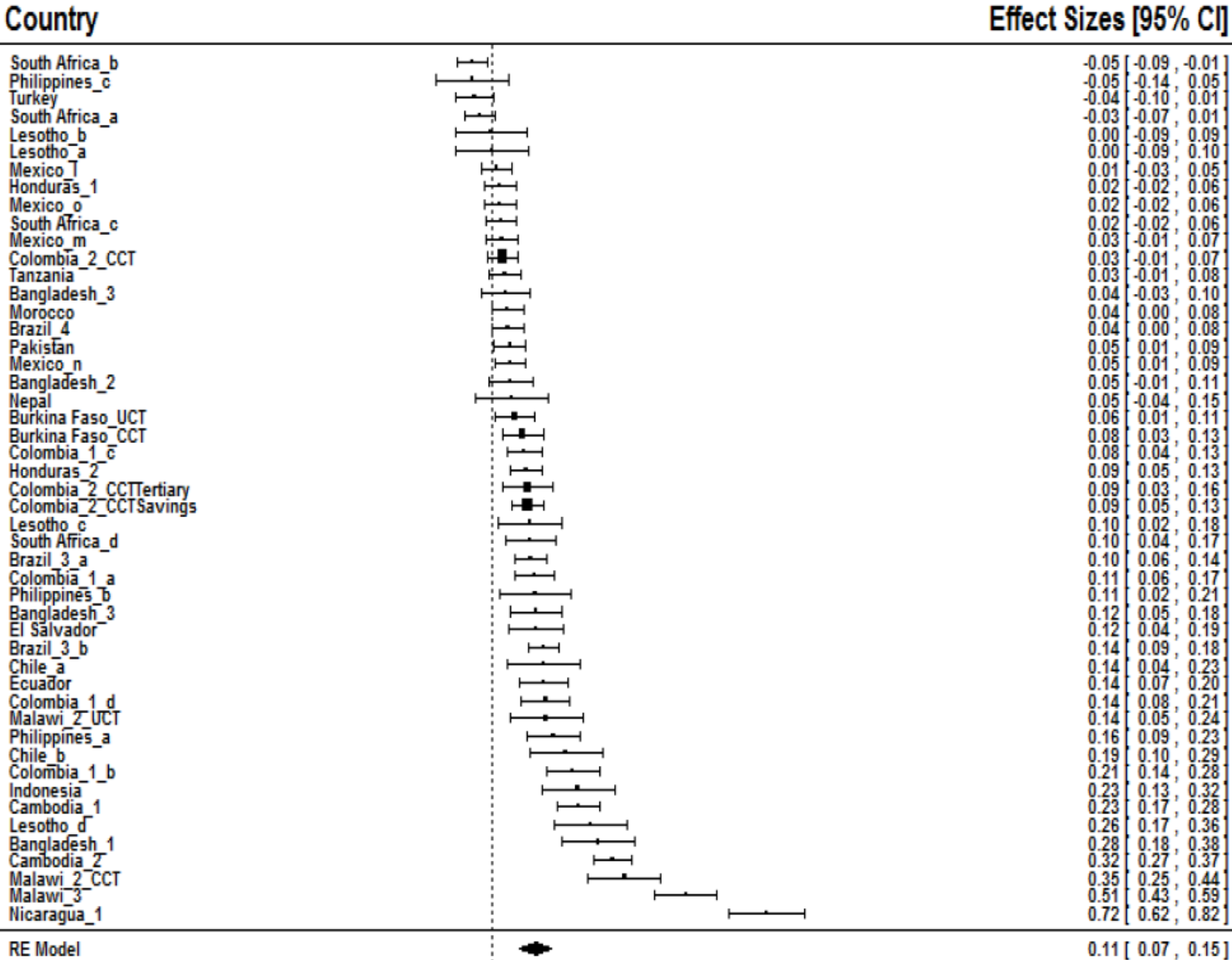
- 48 studies included in the SR
- High level of fidelity



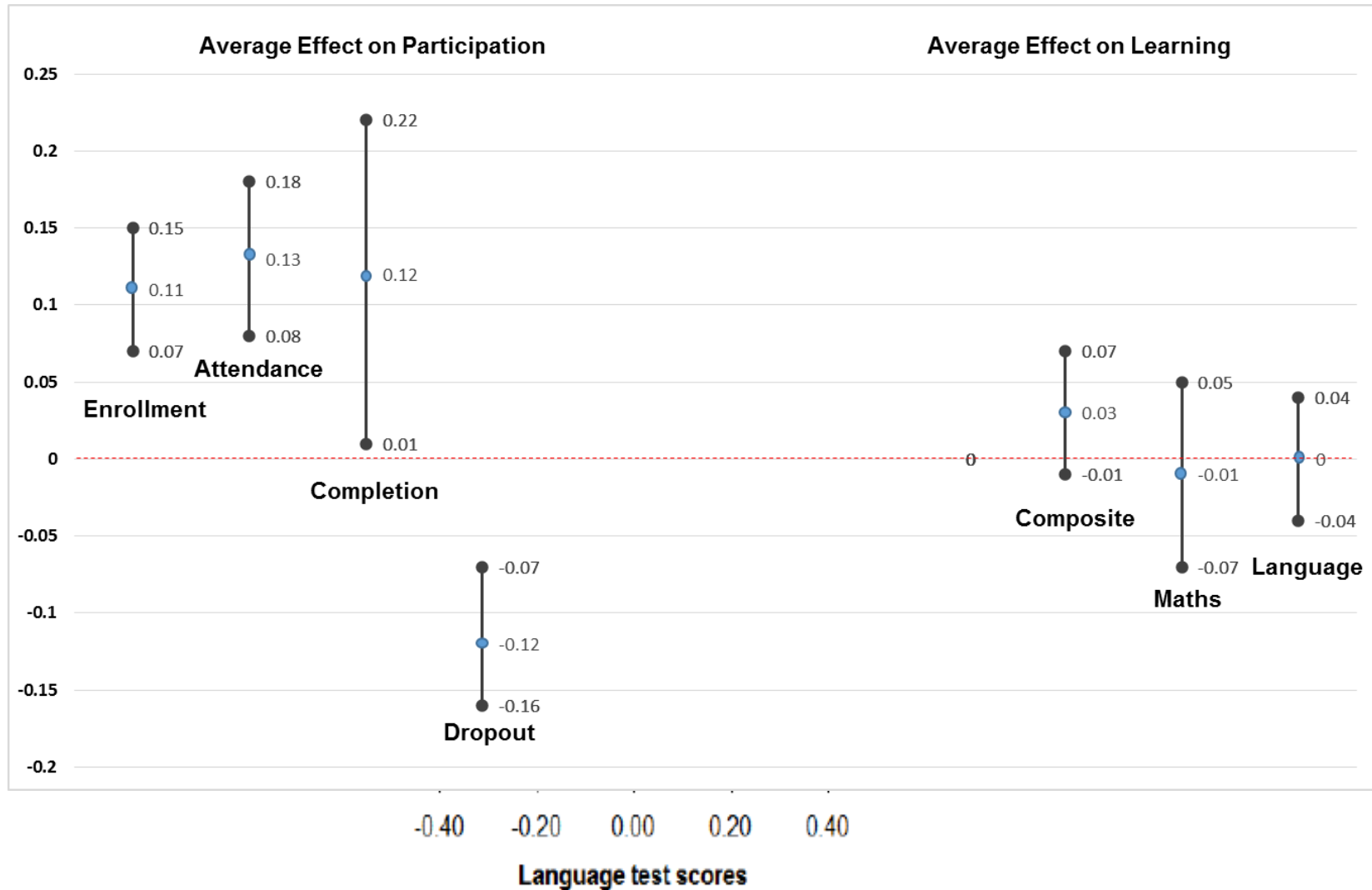
# Showing the result in a forest plot



# Effect of Transfers on Student Enrolment



# Effect of Transfers on Participation and Learning



# Where did it work?: schools were of sufficient quality and when conditions were enforced

- **Cases where schools were reasonably good had better results in learning**
  - Colombia: vouchers could be taken to private schools
- **Conditions matter**
  - Tighter monitoring and enforcement led to better outcomes
  - Most conditions were on participation



Source: [www.thesun.co.uk](http://www.thesun.co.uk)

# Computer Assisted Learning (CAL)

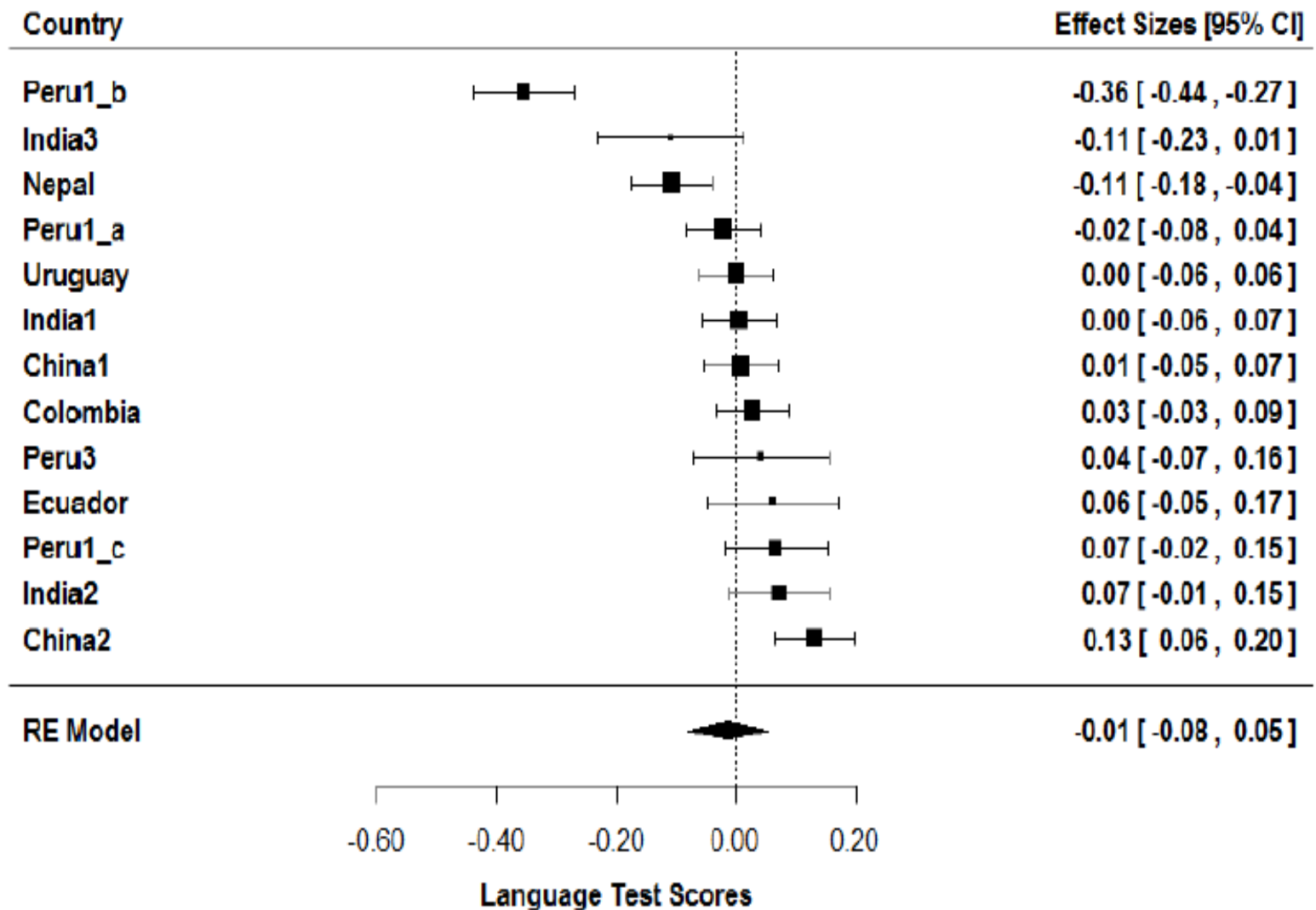
Provide access to computers to facilitate learning

- Increase supply of low-cost hardware (e.g. one laptop per child)
- Usually integrated package: software and capacity building (but not all)

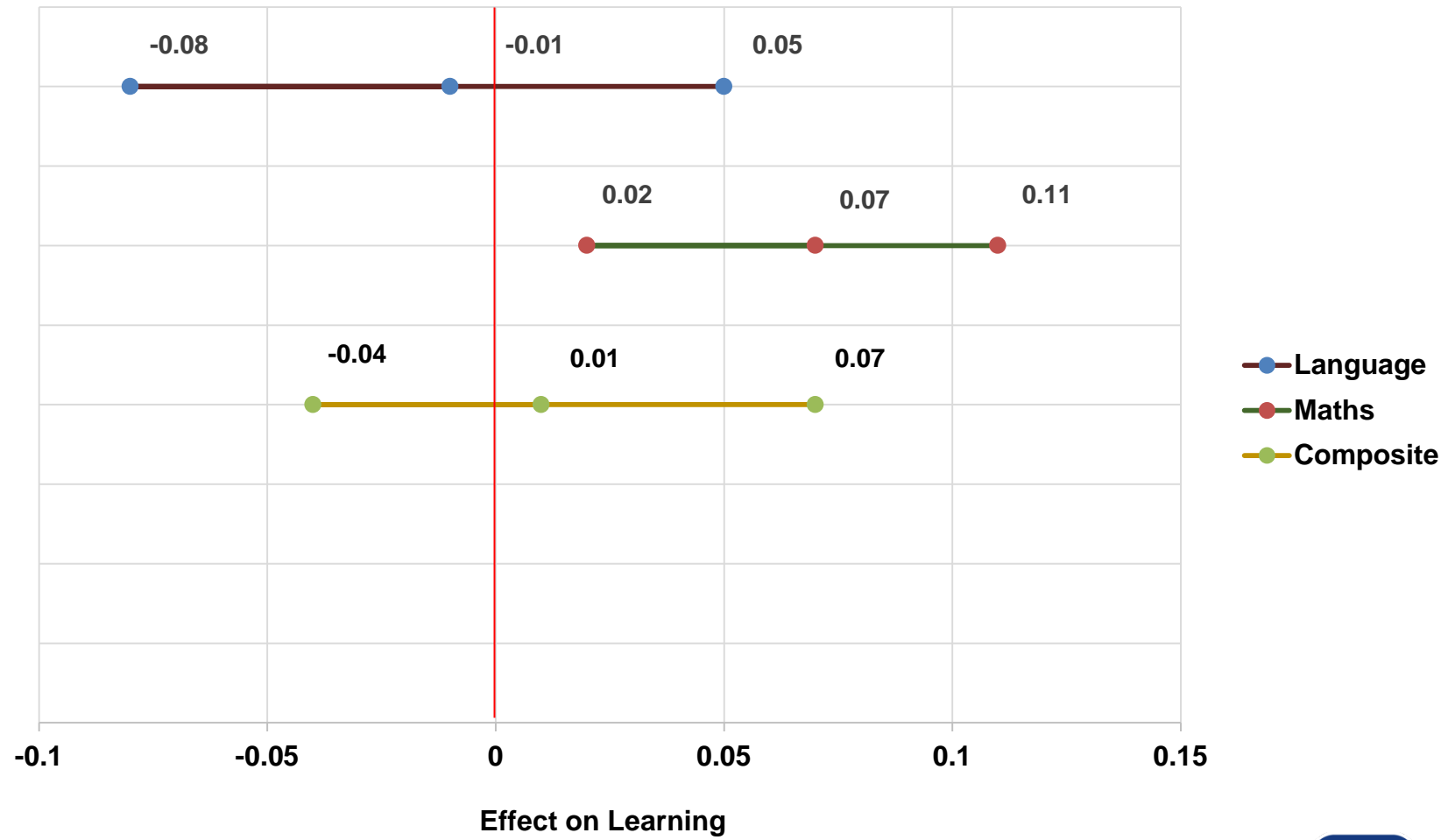


Source:  
<http://www.worldcomputerexchange.org/computers-schools-libraries-latin-america>

# CAL on Learning



# Results: positive but variable



# Where did it not work? When the rest of the system responds negatively to the intervention

*Negative effects when CAL replaced regular teaching (China, India)*

*When teachers didn't respond positively or see it as a hindrance because it required teaching computing as well as material and remediation to stimulate the right response isn't sustained (Peru)*

# Implementation matters: structured pedagogy

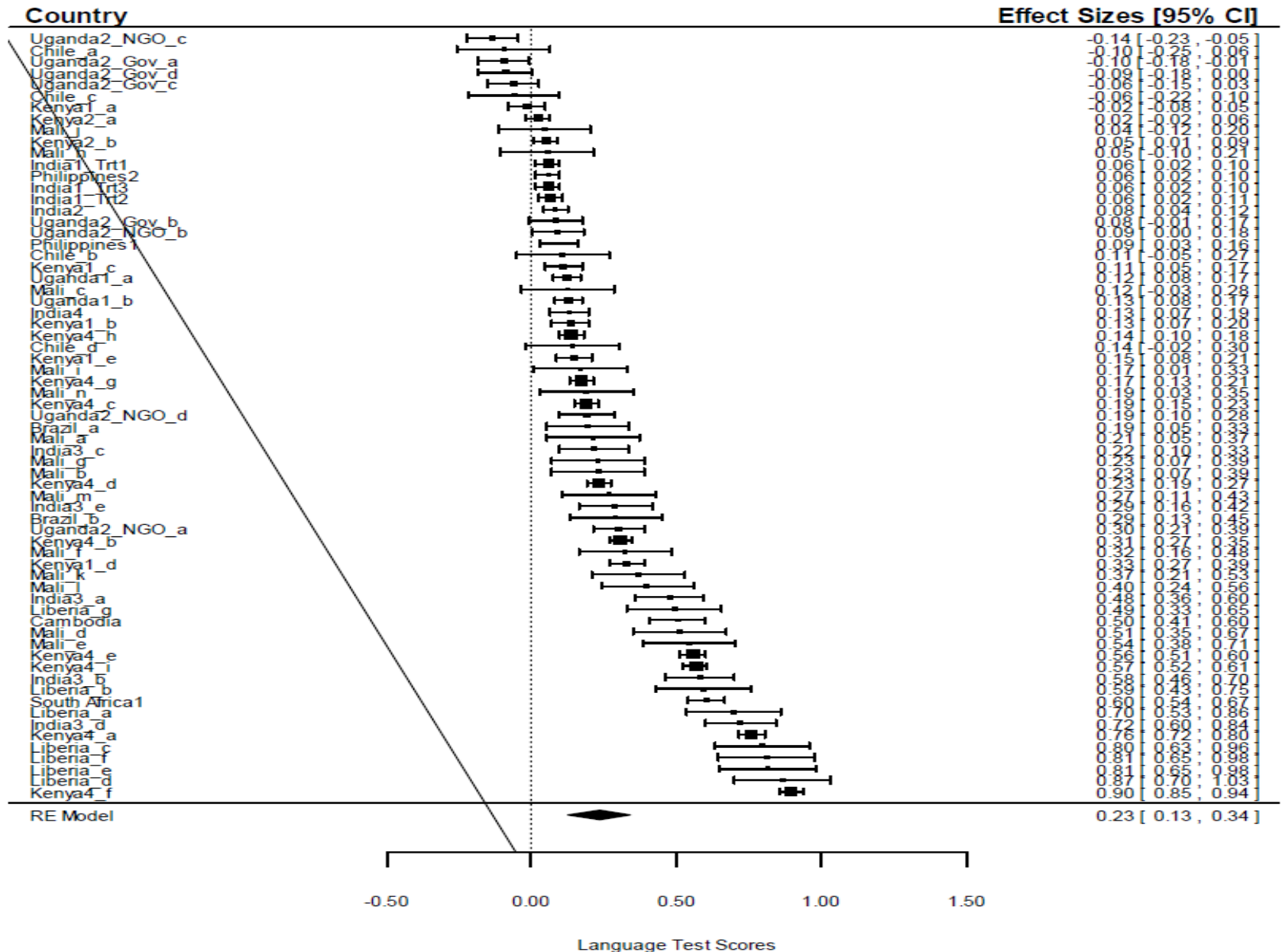
## Structured Pedagogy:

- evidenced based content and lesson plans
- provision of new materials and teaching aids
- teacher training on new content and materials
- teacher buy-in

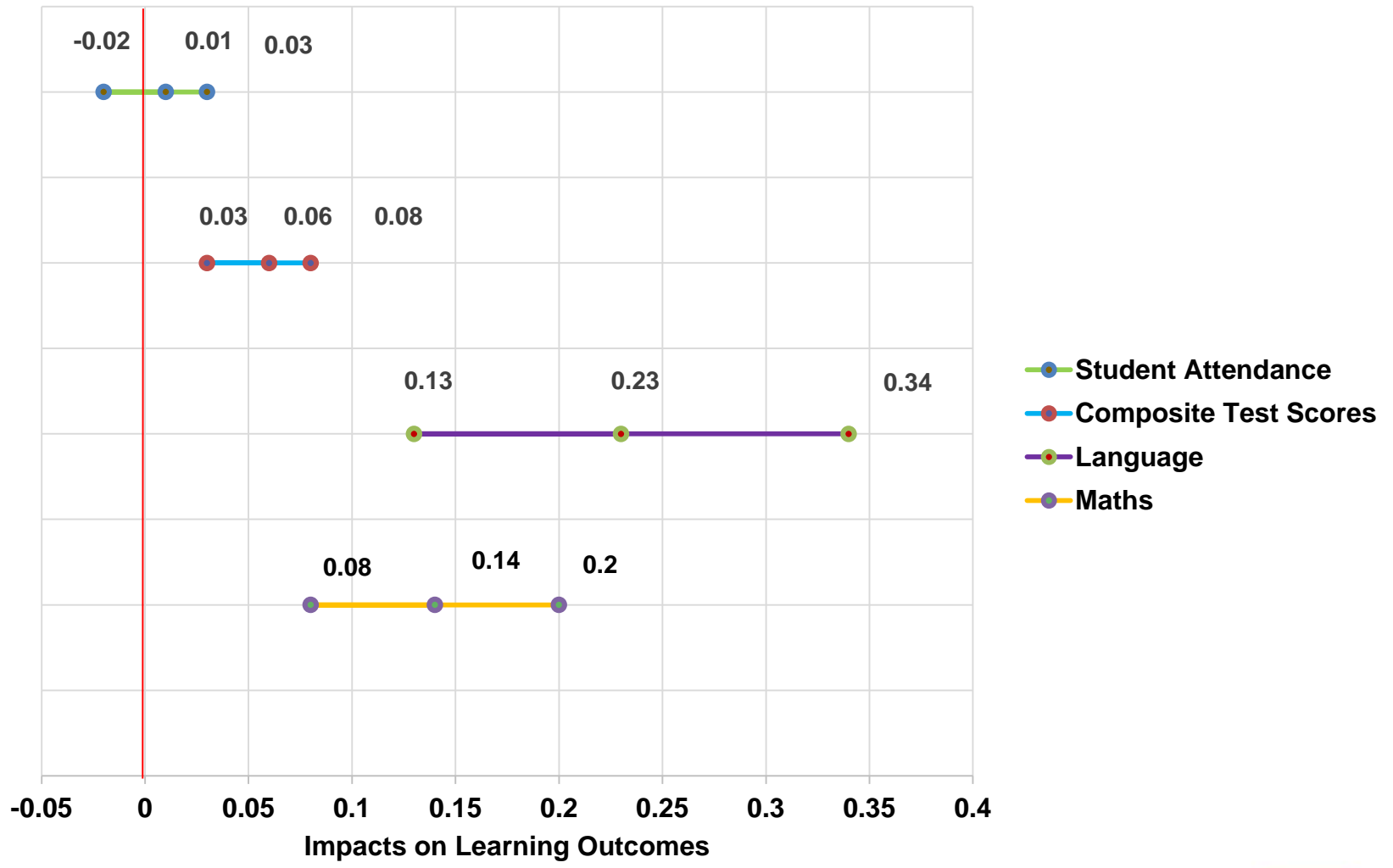


<http://www.projects-abroad.com.au/projects/teaching/general-teaching-projects/philippines/>

# Effect of Structured Pedagogy on Learning



# Pedagogy: Impacts on learning outcomes



# Where did it not work?

## Kenya: Primary Math and Reading

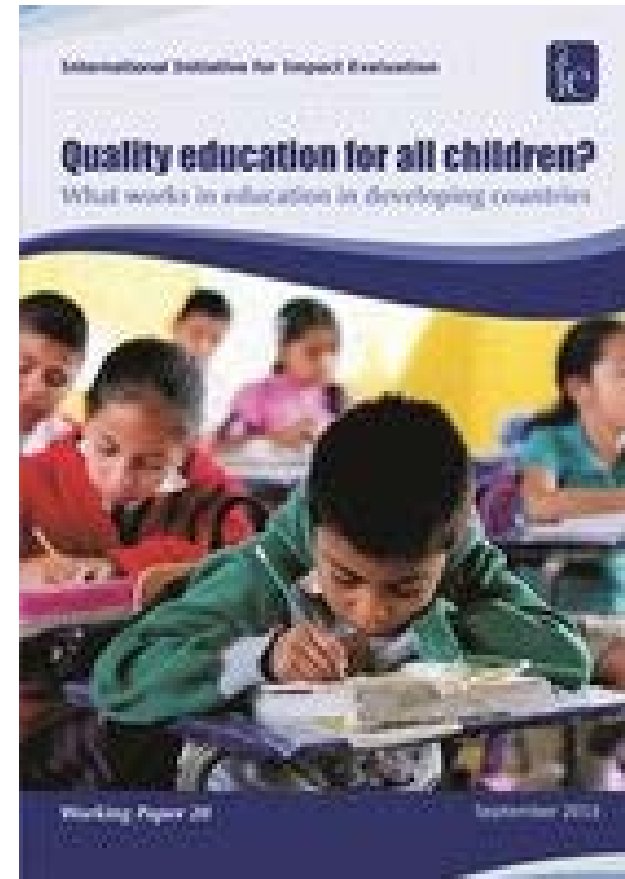
- class 2 materials deemed too difficult
- but teachers chose not to accept this and convinced parents
- led to negative results and take-up

## Mali: Read-Learn-Read Intervention:

- not all schools received materials as planned
- intervention started later than intended
- classes not held as often as envisioned
- teacher turnover caused disruptions

# In sum

- Rigorous evaluation of what works to improve education outcomes has improved but there are still enormous gaps:
  - Some topics are not well covered
  - Large variance in what is available
- Taking into account local context and a systemic view are key:
  - need to make sure that other parts of the system are ready
  - consider the effect of the interventions on the behavior of those other parts
  - implementation is as important as design



- Find Evidence
- Policy Briefs
- Systematic Reviews
- Impact Evaluations
- Evidence Gap Maps

3ie SF Systematic Review : 2015 | Review

print page

# Interventions for Improving Learning Outcomes and Access to Education in Low- and Middle-income Countries: a Systematic Review

**Author** Birte Sreibeiit, Jennifer Stevenson, Daniel Phillips, Martina Vojtkova, Emma Gallagher, Tarja Schreindl, Hannah Adoo, Marlene Gensler, Maria Grazia Pastorello, John Eyles

**Region** All Low and Middle Income Countries

**Sector** Education

**Sub-sector** Educational Inputs, Girls Education, Non-formal Education, Pre-Primary and Primary Education, Public/ Private Sector Education, Secondary Education, System Reform or Capacity Building

**Equity Focus** Gender

**Review Type** Effectiveness review

**Publication Details**

Sreibeiit, B, Stevenson, J, Phillips, D, Vojtkova, M, Gallagher, E, Schreindl, T, Adoo, H, Gensler, M, Pastorello, M, and Eyles, J. 2015. Interventions for improving learning outcomes and access to education in low- and middle-income countries: a systematic review. *The Final Review*. London: International Initiative for Impact Evaluation (3ie)

[Link to Source](#)

## Main findings

Findings will be updated soon.

## Background

Education is considered essential for sustainable development and is a fundamental human right, as stated by article 26 of the Universal Declaration of Human Rights. Substantial efforts have been made in recent years to improve access to education in Low and Middle-Income Countries (LMICs), and while there has been significant progress, this has been uneven and challenges remain. As a response to the importance of education to international development, the proposed systematic review will identify, appraise and analyse the findings of all impact evaluations on educational interventions in LMICs over the past two decades that aimed to improve access to, and quality of, schooling.

## Research objectives

As stated by authors in the protocol: 'The primary objective of this review is to identify, assess and synthesise evidence on the effects of education interventions on children's access to education and learning in low and middle income countries. We will also aim to assess how education interventions affect different sub-groups of participants by incorporating sub-group analyses, and will also include a broader range of evidence to address questions relating to process, implementation and cost-effectiveness.'

## Methodology

Studies will be included that measure the effects of interventions using experimental and quasi-experimental study designs. To address the review questions related to process, implementation and cost, included studies will then be used as the basis for a second phase to identify and include qualitative studies, project documents, process evaluations and other supplementary data on the programmes examined by the impact evaluations included.

Broadly defined, interventions will be included if they aim to improve the access and/ or quality of primary and secondary education and are targeted at primary school and secondary school age children in low and middle-income countries (LMICs), as defined by the World Bank. Intervention categories include school based health programmes, school feeding programmes, providing information to children and households on the returns to schooling, scholarships, fee reduction or elimination, cash transfers, teacher training, teacher incentives and accountability, school based management, school choice, community based monitoring and accountability, provision of materials, pedagogy, and new schools and infrastructure. Included studies must assess one of the following primary outcomes of interest: enrolment, attendance, drop-out, learning, completion, teacher attendance, or teacher performance.

## Source link

[http://www.3ieimpact.org/media/filer\\_public/2015/12/31/education-reviewfinalreport.pdf](http://www.3ieimpact.org/media/filer_public/2015/12/31/education-reviewfinalreport.pdf)



<http://www.3ieimpact.org/evidence/systematic-reviews/details/259/>



# Thank you



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