

What does recent evidence tell us are "Smart Buys" for improving learning in LMICs:

Rachel Glennerster

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MAY 2023 2023 COST-EFFECTIVE APPROACHES TO IMPROVE GLOBAL **LEARNING** What does recent evidence tell us are "Smart Buys" for improving learning in low- and middle-income countries? Recommendations of the Global Education Evidence Advisory Panel (GEEAP)

The Panel is convened by the Foreign, Commonwealth & Development Office (FCDO), The World Bank, the United Nations International Children's Emergency Fund (UNICEF), and the United States Agency for International Development (USAID)











Why a global evidence panel in education?







Kwame Akyeampong Co-chair of the panel Professor of International Education and Development, The Open University

Expert in education systems in Africa, including on political economy of reform, teacher training and complementary basic education.



Tahir Andrabi

Inaugural Dean, LUMS School of Education, and Professor of Economics, Pomona College Researcher on education and advisor

Researcher on education and advisor to Government in Pakistan. Cofounder of the Centre for Economic Research in Pakistan CERP.



Benjamin Piper

Director, Global Education, Bill & Melinda Gates Foundation

Education expert who supports grantees that work to improve foundational literacy and numeracy outcomes in low-income countries. Previously supported large-scale education programs across Sub-Saharan Africa, the Middle East, and Asia.



Sara Ruto

Former Chief Administrative Secretary for Education, Kenya

Experienced researcher; served as director/CEO of the PAL Network since its inception in 2015; former Regional Manager of Uwezo East Africa using evidence to draw public attention to children's learning.



Abhijit Banerjee Co-chair of the panel Professor of Economics, MIT

Nobel prize-winning economist celebrated for experimental approach to alleviating global poverty.



Rukmini Banerji

CEO, Pratham Education Foundation. Award winner of the Yidan Prize for Educational Development

Innovator in new pedagogical approaches and assessment, leader of large movement to transform education in India and beyond.



Jaime Saavedra

Regional Director for Human Development, Latin America and the Caribbean, the World Bank, former Minister of Education of Peru

Researcher and policymaker with extensive expertise on education, inequality and poverty reduction.



Sylvia Schmelkes

Professor and Researcher, Research Institute for the Development of Education, Universidad Iberoamericana, Mexico City.

Sociologist and education researcher who headed Mexico's National Institute for the Evaluation of Education; also has expertise in intercultural bilingual education, values, and adult learning.



Susan Dynarski

Professor of Education, Harvard Graduate School of Education

Researcher at the forefront of understanding and reducing inequalities in education, including for college access, financial aid design, labour market outcomes, and high school reforms.



Rachel Glennerster

Associate Professor, Division of the Social Sciences and the College, University of Chicago; former Chief Economist at FCDO

Expert on assessing cost-effectiveness of alternative interventions to reduce poverty, including in education. Researcher and policy advisor.



Hirokazu Yoshikawa

Professor of Globalization and Education, NYU Steinhardt

Community and developmental psychologist; has done extensive research across the US, LICs and MICs, with a particular focus on early childhood and inequality.





Sally Grantham-McGregor Emeritus Professor of Child Health and Nutrition, UCL GOS Institute of Global Health

Pioneer in the rigorous study of Early Childhood Development in developing countries with a focus on parental engagement. An Officer of the Most Excellent Order of the British Empire (OBE).



Karthik Muralidharan

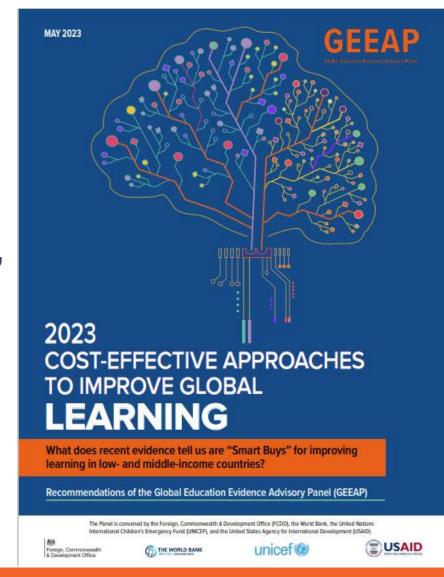
Professor of Economics, University of California San Diego

Global co-chair of education at JPAL. Lead PI in India for the Research on Improving Systems of Education (RISE) program. The Panel is convened by the Foreign, Commonwealth & Development Office (FCDO), The World Bank, the United Nations International Children's Emergency Fund (UNICEF), and the United States Agency for International Development (USAID).



2023 'Smart Buys' Report

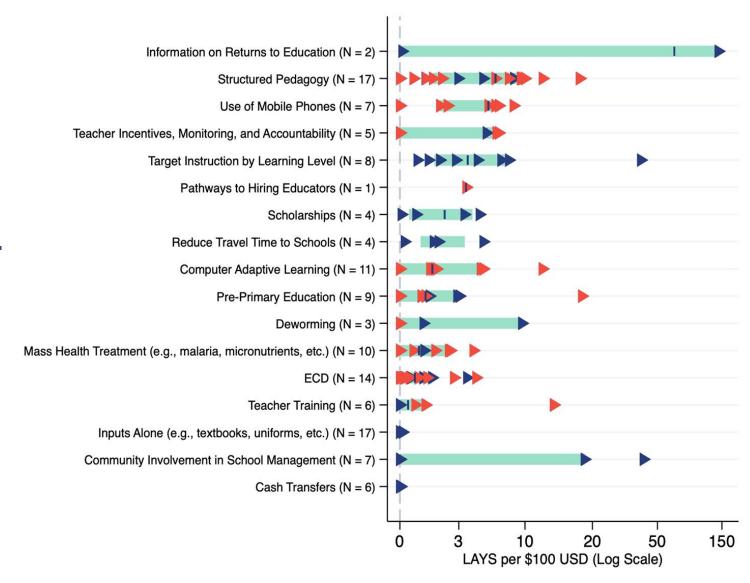
- 'What works' in a cost-effective way at scale in low- and middle-income countries.
- Rigorous evidence based on systematic search of over 13,000 studies, resulting in over 400 studies selected which informed the Panel's recommendations.
- Recommendations for policy makers.
- Update from 2020 GEEAP report.





Cost Analysis

- Systematic search: identify differences in effectiveness, cost and costeffectiveness by orders of magnitude.
- Results in terms of Learning Adjusted Years of Schooling (LAYS).
- Analyzing costeffectiveness was one input of many into decision process for categorizing interventions.



Notes: Data from Angrist et al (2020) in blue. Categories are ordered by median impact. Rectangle delineates 25th and 75th percentiles.



'Smart Buys' Categories

- Great Buy
- Good Buys
- Promising but with limited evidence
- Effective but relatively expensive
- Bad Buys
- Other where governments have to make decisions, but low evidence

EFFECTIVE BUT RELATIVELY EXPENSIVE

There is good evidence that these interventions are effective, but they are a relatively expensive way to deliver learning outcomes.

GREAT BUYS

These interventions are highly cost-effective and are supported by a strong body of evidence.

GOOD BUYS

There is good evidence that these interventions are cost-effective.

PROMISING BUT LIMITED EVIDENCE

For these approaches, there are some rigorous studies that show high levels of effectiveness, but evidence on cost-effectiveness or examples of implementation at scale are lacking.

OTHER INTERVENTION AREAS

Where governments need to make decisions, but evidence on how to do it effectively is limited

BAD BUYS

Strong, repeated evidence shows that these programs have not worked in the past in many situations or are not



Intervention categories in GEEAP report

Great Buys

These interventions are highly costeffective and are supported by a strong body of evidence.

- Supporting teachers with structured pedagogy (a package that includes structured lesson plans, learning materials, and ongoing teacher support)
- Targeting teaching instruction by learning level, not grade (in or out of school)
- Providing information on the benefits, costs, and quality of education

Good Buys

There is good evidence that these interventions are cost-effective

- Providing parent-directed early childhood stimulation programs (for ages 0 to 36 months)
- Providing quality pre-primary education (for ages 3 to 5)
- Reducing travel times to schools
- Giving merit-based scholarships to disadvantaged children and youth
- Administering school-based mass deworming where worm-load is high

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Intervention categories in GEEAP report (ctd)

Promising but limited evidence

For these approaches, there are some rigorous studies that show high levels of effectiveness, but evidence on cost-effectiveness or examples of implementation at scale are lacking.

- Using software that allows personalized learning and adapts to the learning level of the child (where hardware is already in schools)
- Leveraging mobile phones to support learning
- Augmenting teaching teams with community-hired staff
- Involving communities in school management
- Targeting interventions towards girls
- Safeguarding students from violence
- Teaching socio-emotional and life skills
- Providing mass treatment for common health conditions including free eyeglasses, multi micronutrients, and preventative malaria treatment

Effective but relatively expensive

There is good evidence that these interventions are effective, but they are a relatively expensive way to deliver learning outcomes. They might be appropriate for school systems with larger budgets or to achieve non-education objectives.

- Transferring cash (as a tool for improving learning)
- Feeding in Primary Schools





Intervention categories in GEEAP report (ctd)

Bad Buys

- "Bad Buys" if investing in hardware or additional education inputs (incl. hardware) <u>alone</u>
 - Interventions where the evidence has repeatedly shown that the approaches—as typically implemented—are either not effective or not cost-effective.

- Investing in hardware like laptops, tablets and computers <u>alone</u>
- Providing additional inputs <u>alone</u>, <u>when other issues are not</u> <u>addressed</u>, including: textbooks, additional teachers to reduce class size, school buildings, grants, salary, libraries



Bad Buys

School systems should strongly consider prioritizing the much more cost-effective interventions.



Targeting teaching instruction by learning level, not grade (in or out of school)

- Includes: providing targeted help for students who are falling behind, and grouping children for all or part of the day based on their learning level rather than their age.
- Can be implemented by government teachers, volunteers, or teaching assistants
 - Multiple modes of delivery Delivery in-school by tracking in groups without changing curriculum, afterschool remediation, during holiday camps.



Great Buy



Targeting teaching instruction by learning level, not grade (in or out of school) (ctd.)

Examples:

- Targeted instruction programs like Teaching at the Right Level (TaRL)
 have been implemented in a variety of settings and evaluated rigorously
 (India).
- A version of this approach that includes an interactive pedagogy has been tested in thousands of schools in **Ghana** and implemented at scale in **Cote d'Ivoire** and **Zambia**.
- A less-intensive approach is to introduce tracking, where children are grouped by their initial level of learning without any change in pedagogy. This was highly cost-effective in **Kenya**, but met with some resistance in **India**.



Great Buy

Context:

Effective with wide variety of learning levels within a class, and where student learning levels are below grade-level curriculum expectations.



Context is crucial ...

- Context, political economy, and implementation details are critical.
 Complementarity may play crucial role in cost effectiveness.
- Outcome depends on the quality of implementation.

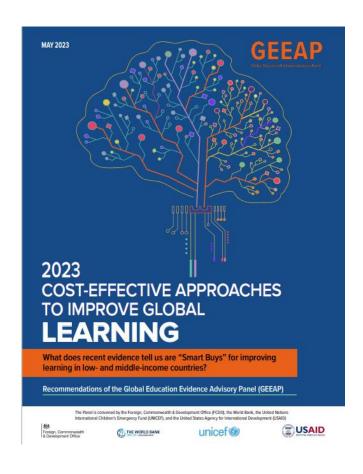
... and systems need to be aligned

 Ensuring learning for all children and youth requires an education system that is coherent and aligned toward learning for all





Access the report here:



https://tinyurl.com/yx327b65



Disclaimer:

The GEEAP reports have been produced by the Global Education Evidence Advisory Panel, with the support of its secretariat, which includes researchers at the U.K. Foreign Commonwealth and Development Office (FCDO), UNICEF, USAID, and the World Bank.

The judgments are the panel's own, drawing on their reading of the available research and evidence; their conclusions do not necessarily reflect the policy positions of the panelists' institutions, or of the convening and hosting institutions.