

# The Ghana Teacher Community Assistant Initiative (TCAI)



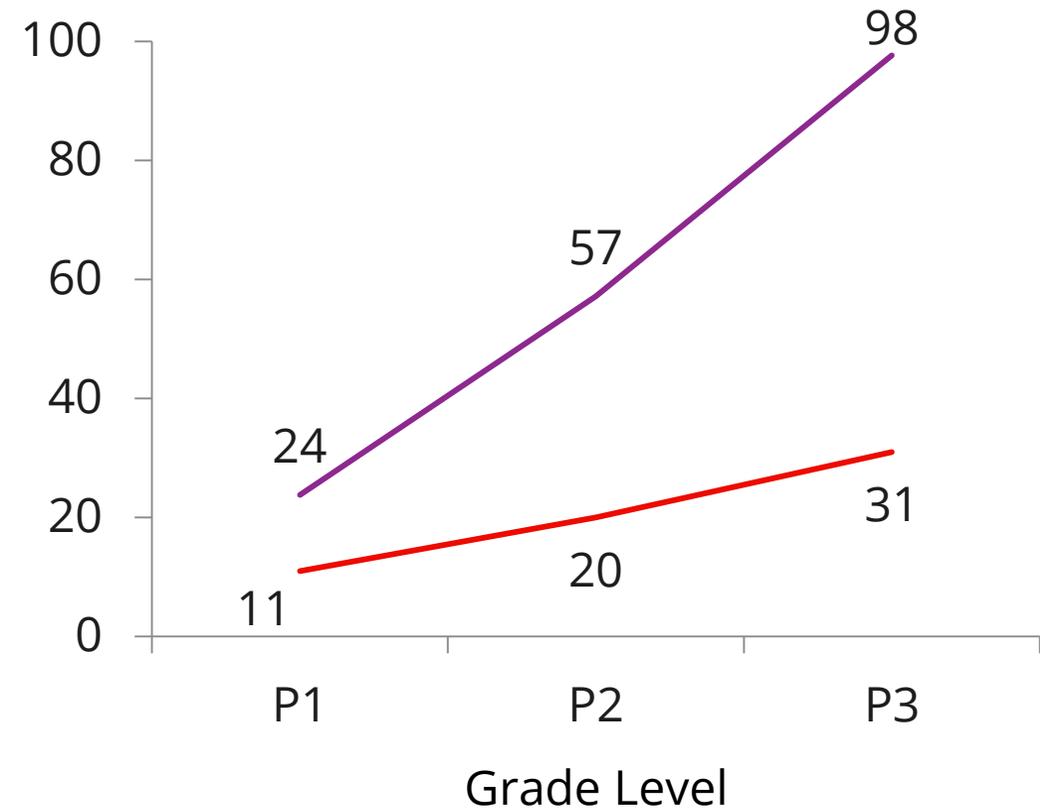
Annie Duflo, Executive Director, Innovations for Poverty Action, March 28<sup>th</sup>, 2017



# Learning Gaps

Dede and Hawa like flowers.  
They plant seeds.  
They water the seeds.  
Plants begin to grow.

## English Test Scores

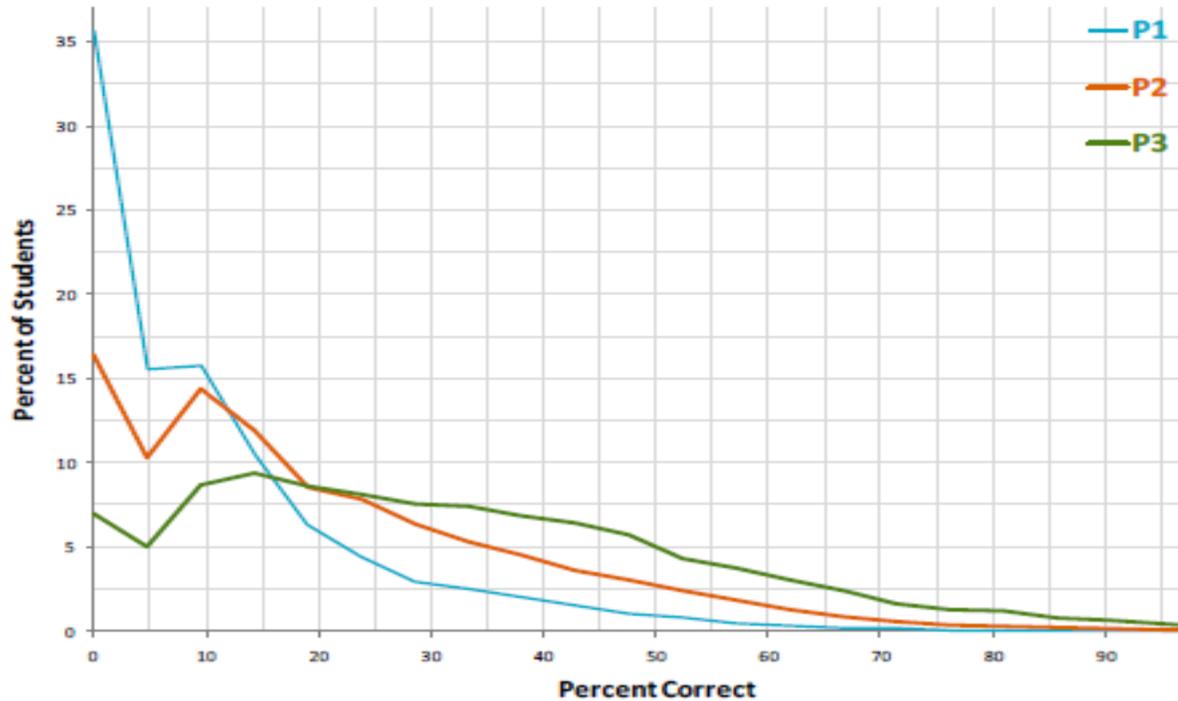


— Expected score  
— TCAI baseline (2010)

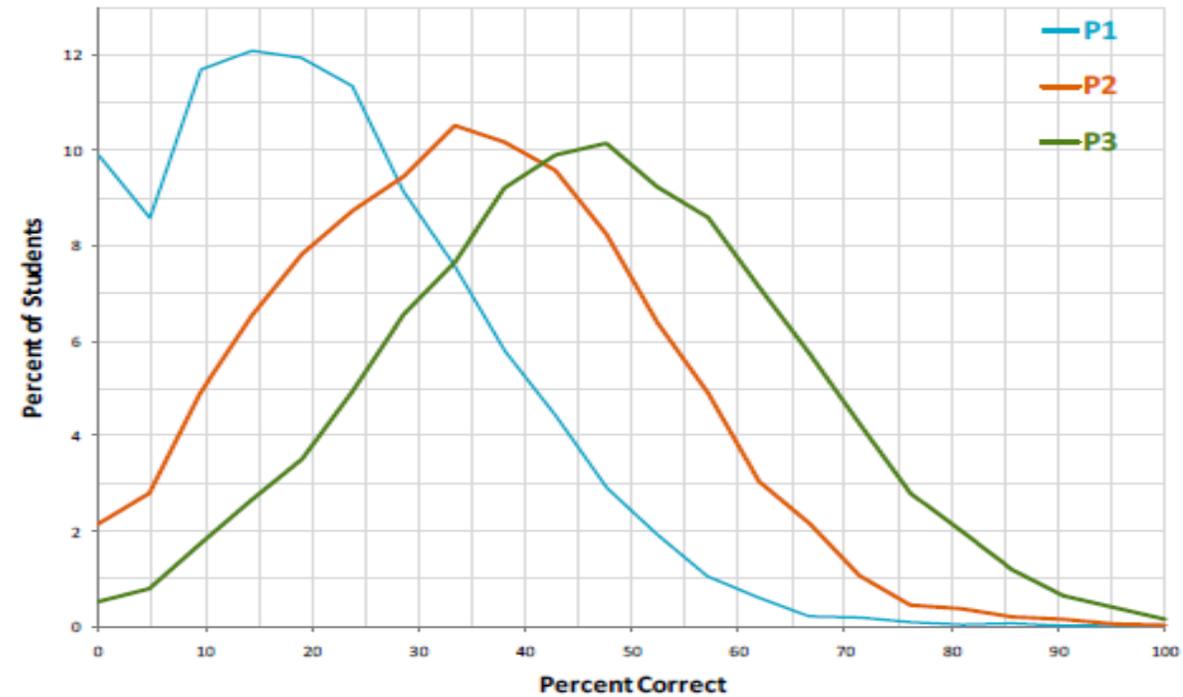


# Heterogeneous Learning Levels

English



Math



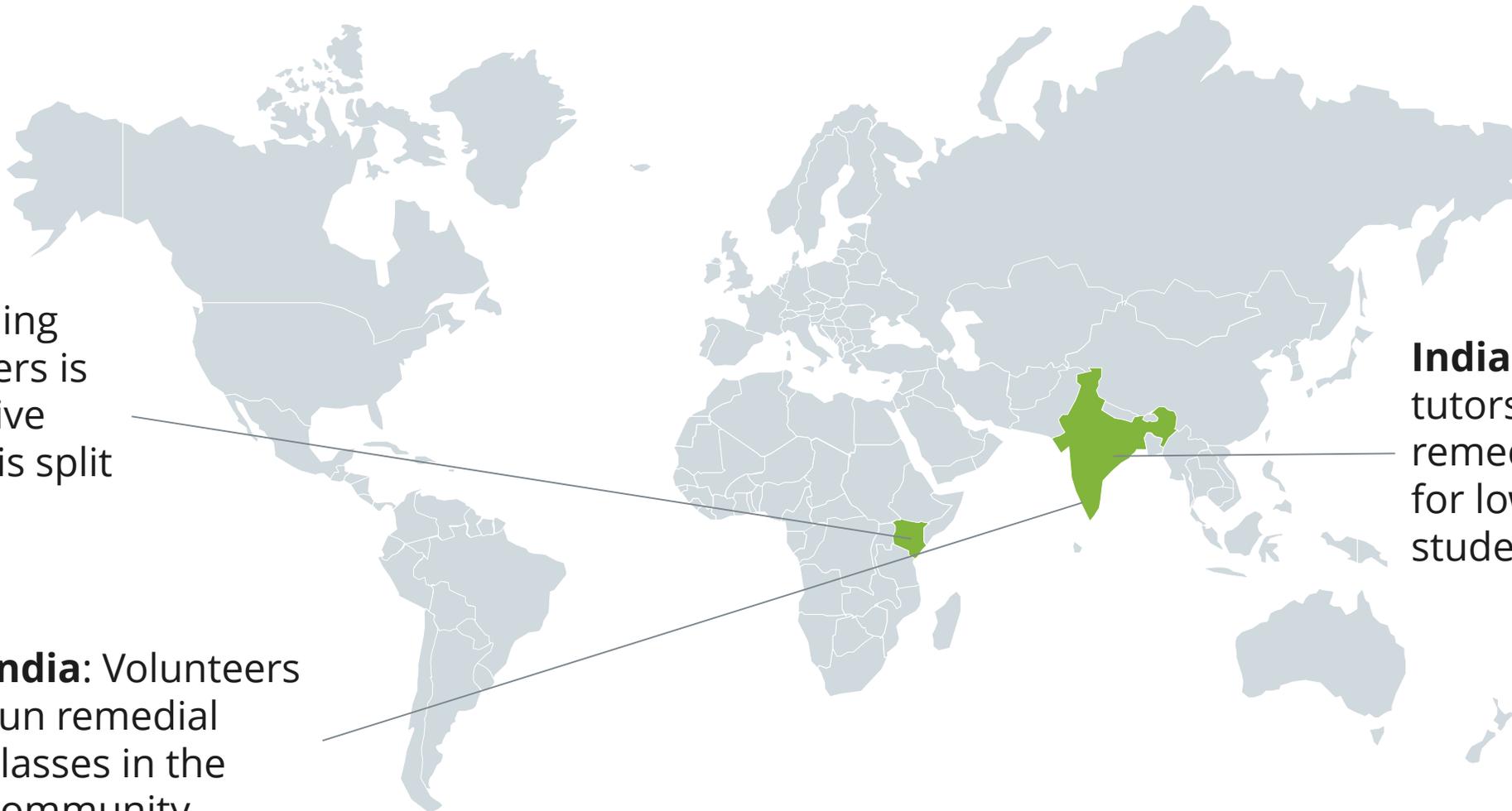
# What Had We Learned as of 2010?

Focusing Instruction at the Right Level is Key

**Kenya:** Adding Extra teachers is most effective when class is split by ability

**India:** Volunteers run remedial classes in the community

**India:** Community tutors conduct remedial classes for low-performing students



# From India to Ghana, With a View to Scale

- The **key concept** that made earlier programs successful: **targeted instruction**
- **Context:** What is similar; what is different? How will that affect implementation?
- **Financial feasibility:**  
Using existing mechanisms



# Program Design and Support

The intervention was implemented through the GES and NYEP, with support from IPA and the GNAT



- During or after school?
- Is it targeted instruction that matters, or an additional resource?
- Do we really need assistants? Can we train teachers to do this?



# Evaluation Design

500 schools  
across 42 districts  
in all 10 regions

Randomly allocated to :

Comparison  
group

100 schools

Assistant-led  
remedial  
classes **during  
school**

100 schools

Assistant-led  
remedial  
classes **after  
school**

100 schools

Assistant-led  
review for  
**randomly  
selected**  
students

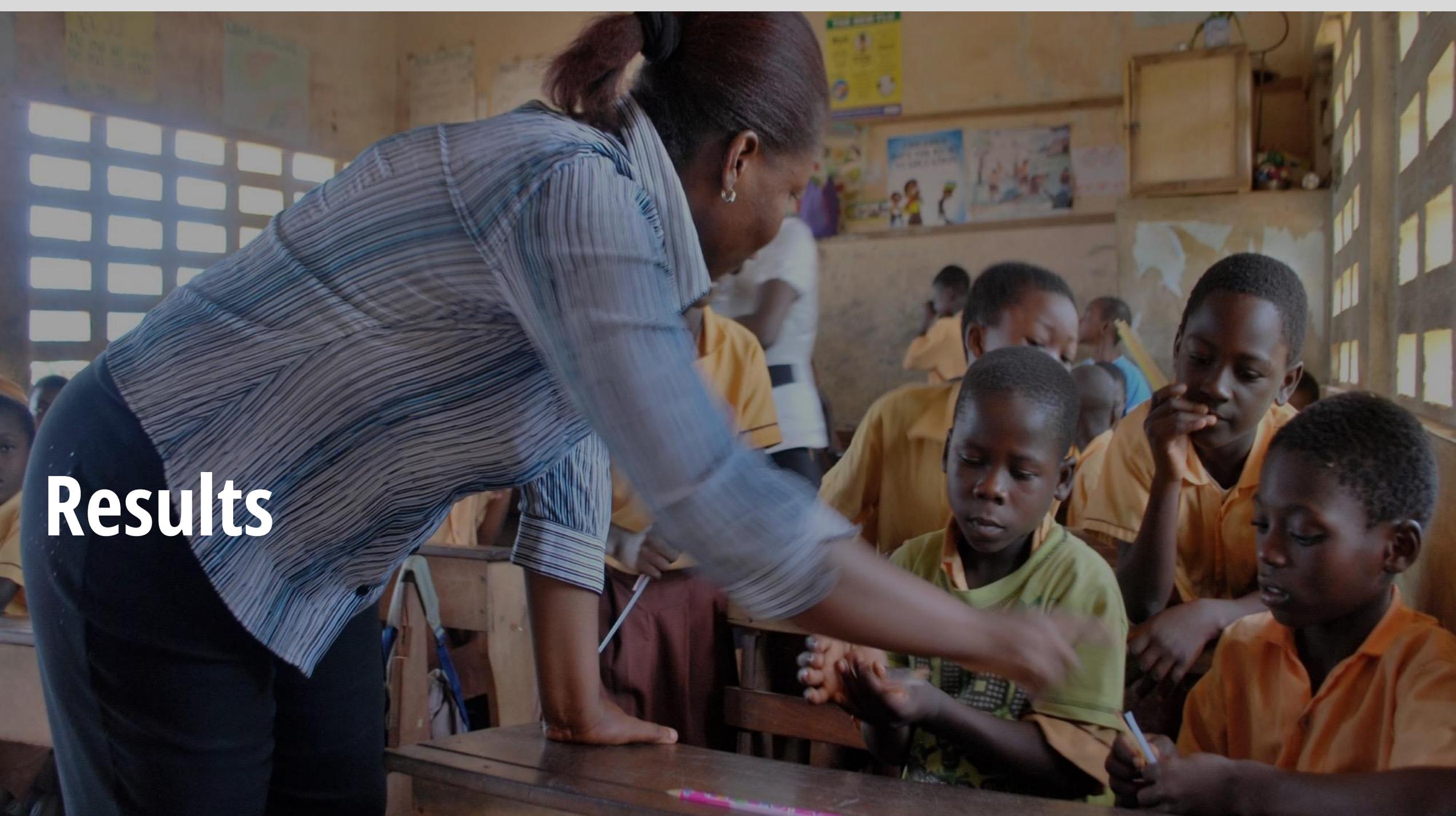
100 schools

**Teacher-led**  
targeted  
instruction

100 schools

**42,000 grade 1-3 children were tested with an orally administered test**





**Results**

# Overview

## Targeted instruction works

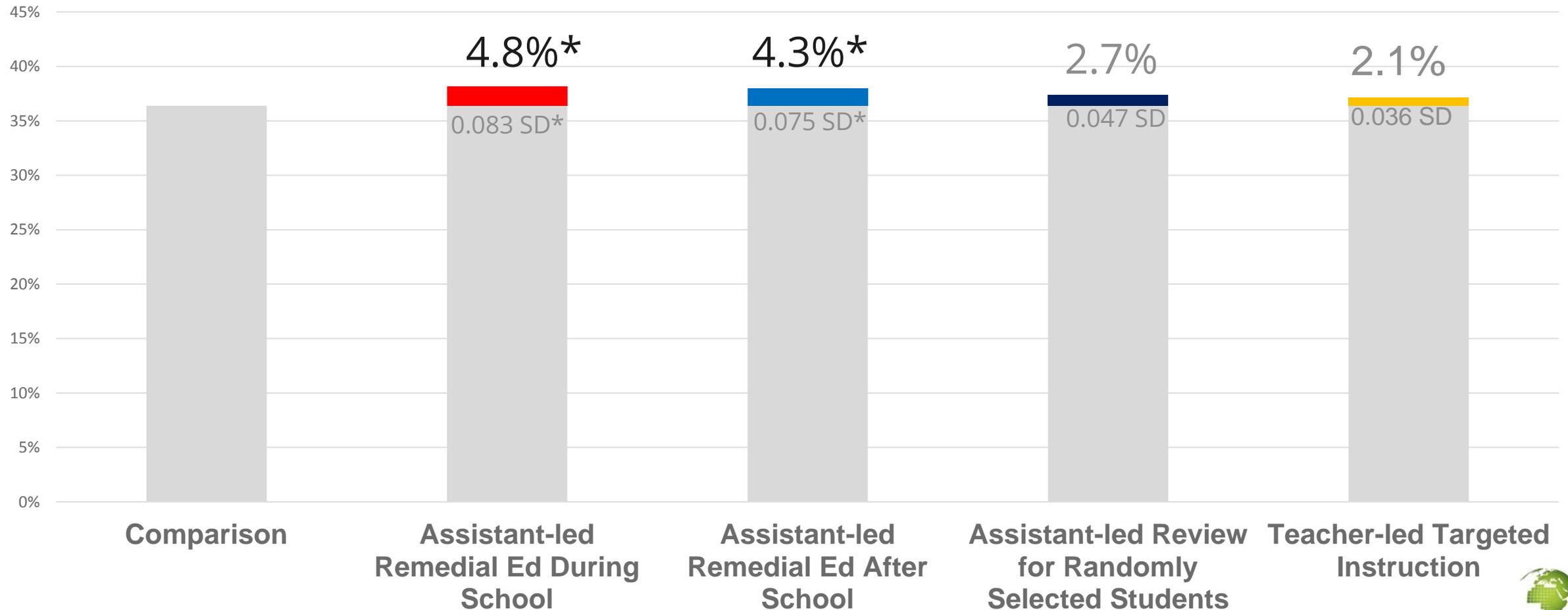
- Small but significant effects of assistants-led remedial classes before & during school for P1-P4
- Larger impact in P3-P4, and larger for reading and computation sections
- Teacher-led targeted instruction also had effects in P3-P4, but smaller, due to less consistent implementation
- Effects persisted 1 year after program implementation (P4 students)
- Implementation challenges suggest high impact potential if implementation is improved



# Positive Impacts

Small but significant effects of TCA remedial education before & during school

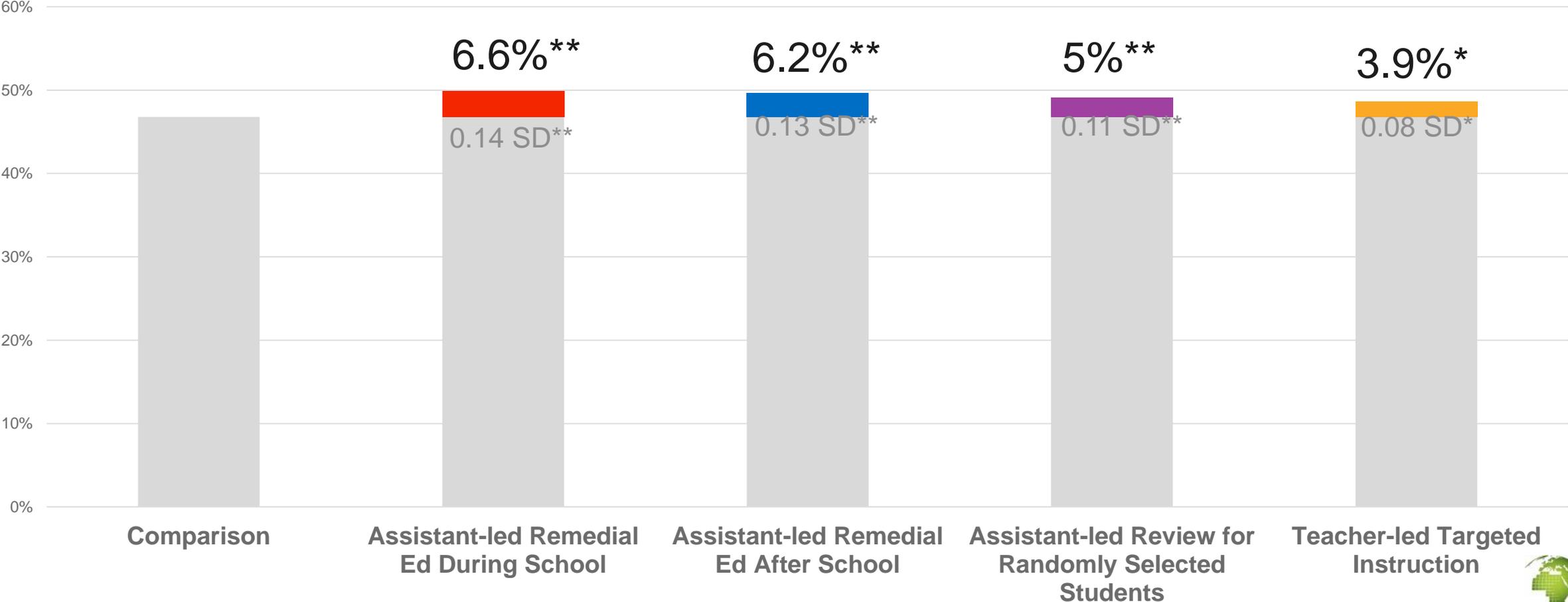
## Overall Test Scores (P1-P4)



# Effects Mostly Driven by P3-4, and Long Lasting

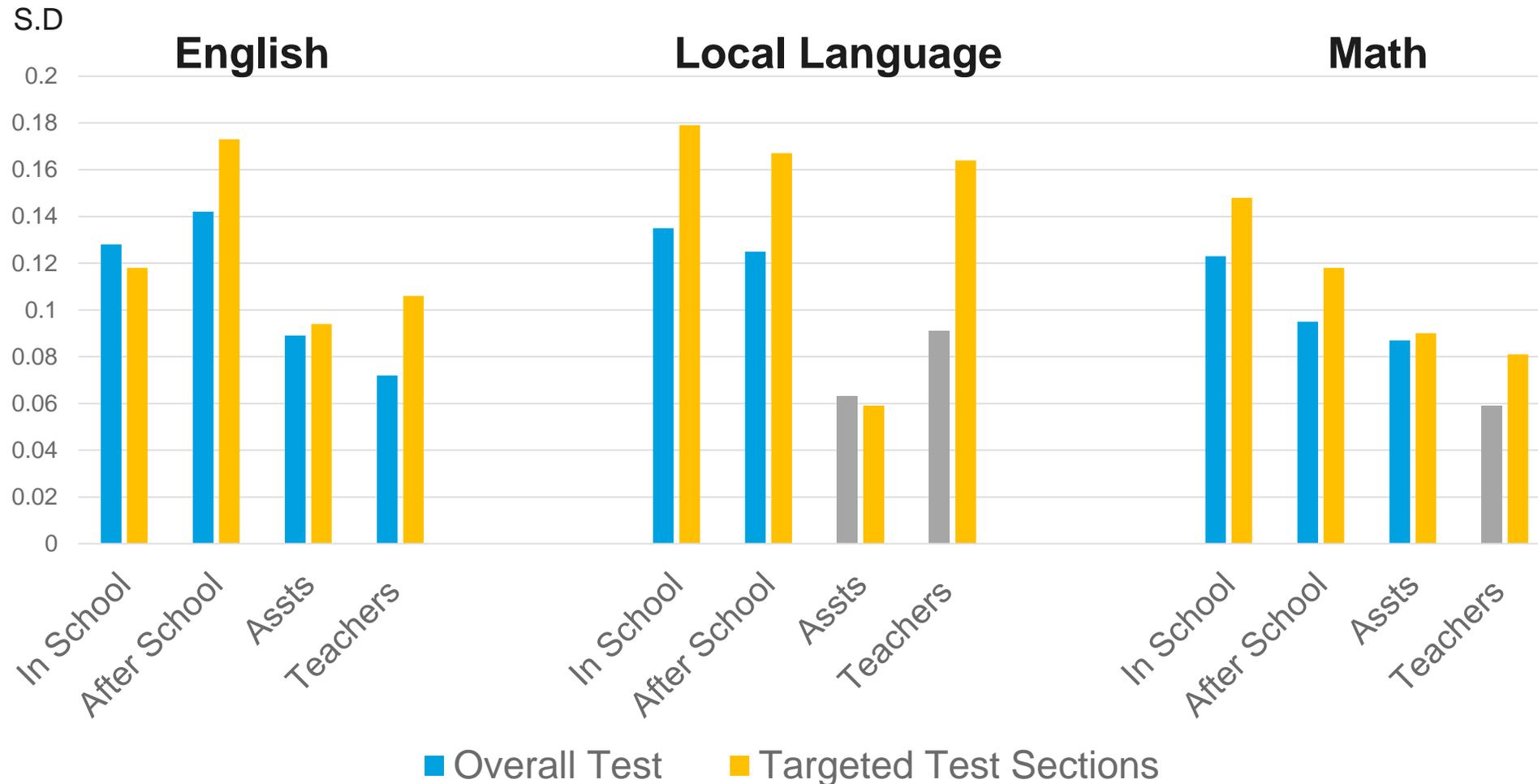
Positive effects on all interventions in P3-4: Higher needs, and longer/better exposure?

## Overall Test Scores (P3-P4)



# Higher Impacts on Reading and Computation Skills

Test score increases: between 6% and 18% for targeted skills

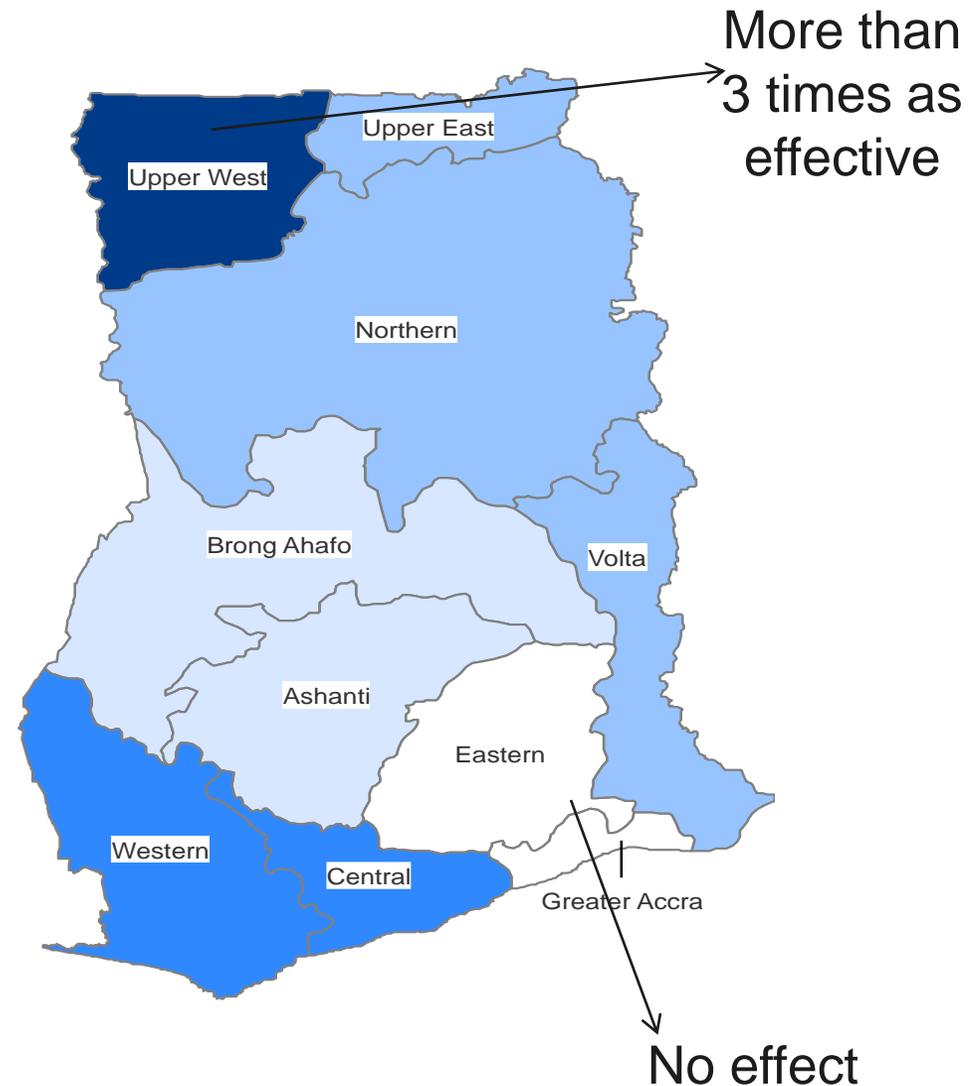


# Despite Relatively Low Exposure

- Implementation design overall was followed
- Assistants teaching remedial class 30% of the time
- Teachers split classes by ability 15% of the time
- However teachers overall were teaching more often (45% vs 34% of the time)

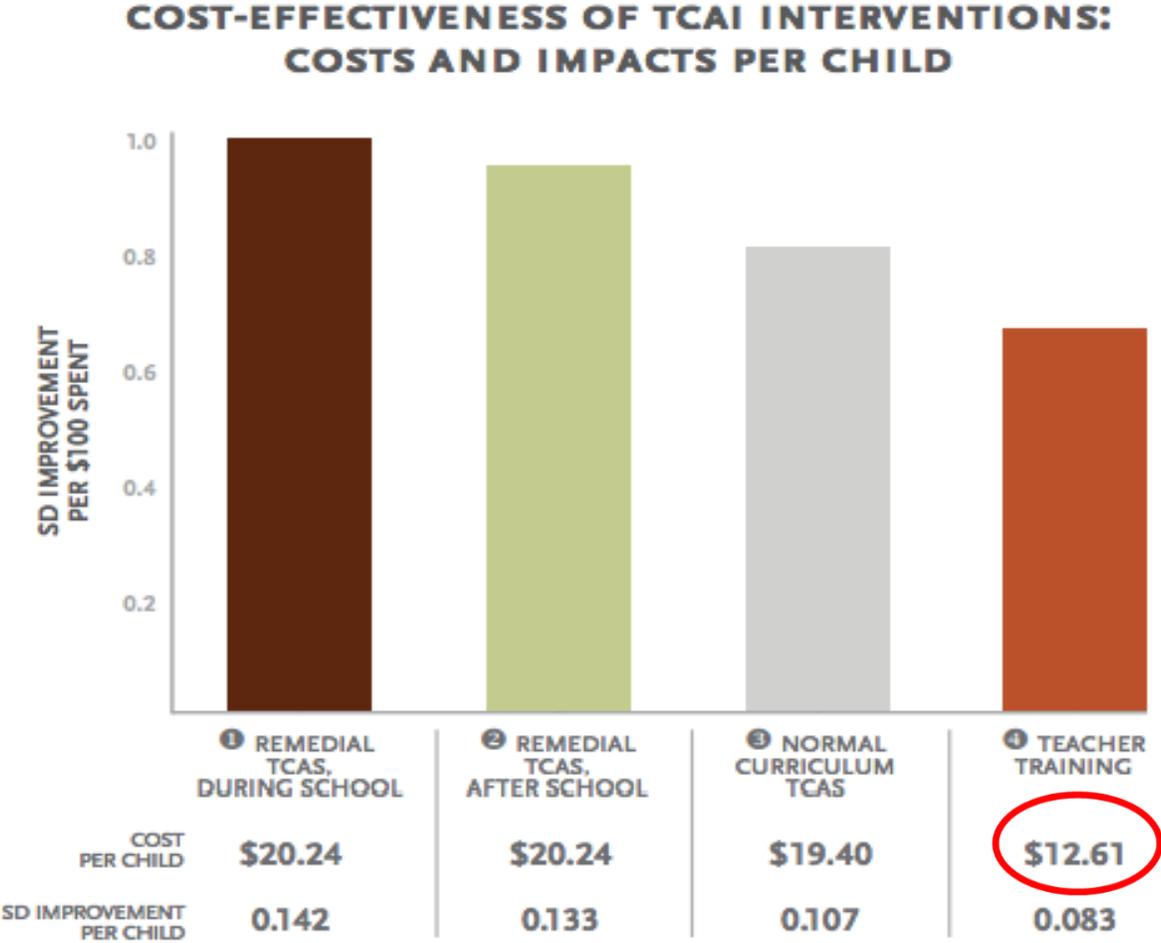


# Large regional variations linked to implementation variations



# Which program is most cost effective?

“How much do I need to invest for each unit of additional learning per child?”



SOURCE: [Cost effectiveness report: TCAI](#)



# The Way Forward

## Improving Teacher-led Targeted Instruction: with the GES and UNICEF

- How to motivate teachers to target instruction?
- Circuit supervisor role?
- Intrinsic motivation?
- STARS study: Adrienne Lucas, Willa Friedman, and Moussa Blimpo

## Adopting the Assistant-led model: Exploring using the NSS

- National Service Personnel → Teaching Assistants
- Teaching Assistants implement targeted instruction



# Takeaways: What Have we Learned?

- **Targeted instruction works for P 3-4 students**
- It could have larger impacts with greater **exposure to the intervention**
- It is critical to find ways to **increase the teachers' motivation/ability to implement targeted instruction**

