

# **Adapting and Scaling Evidence: The Ghana Teacher Community Assistant Initiative**

**Annie Duflo, June 19<sup>th</sup>, 2015**



# LARGE LEARNING GAPS

Dede and Hawa like flowers.

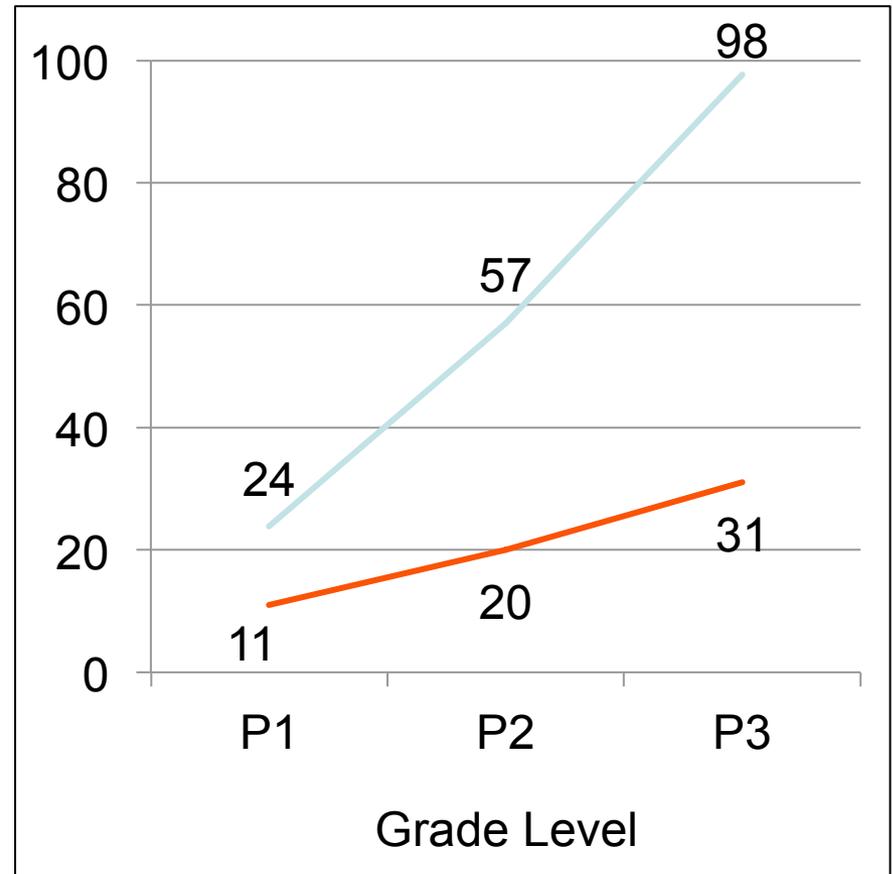
They plant seeds.

They water the seeds.

Plants begin to grow.

Dede and Hawa now have many flowers.

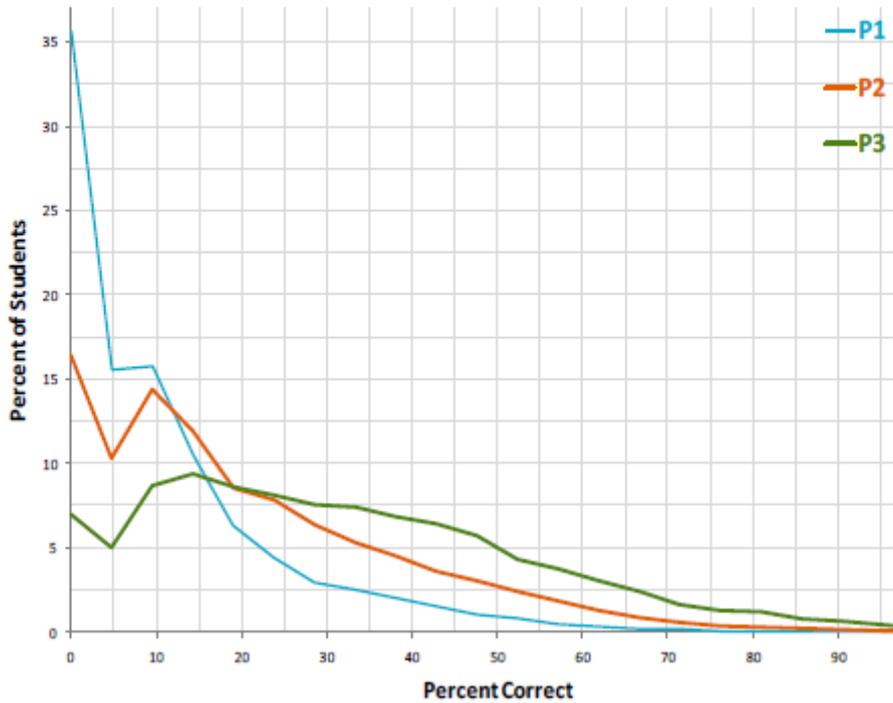
English Test Scores



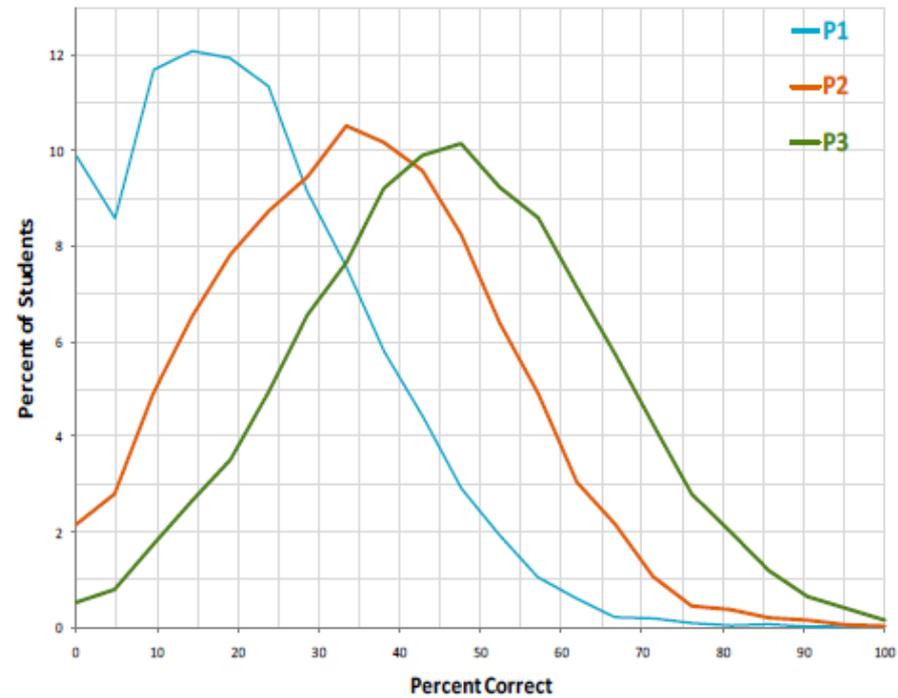
— Expected Grade Level Score (%)  
— TCAI School Score (%)

# HETEROGENEOUS LEVELS

English



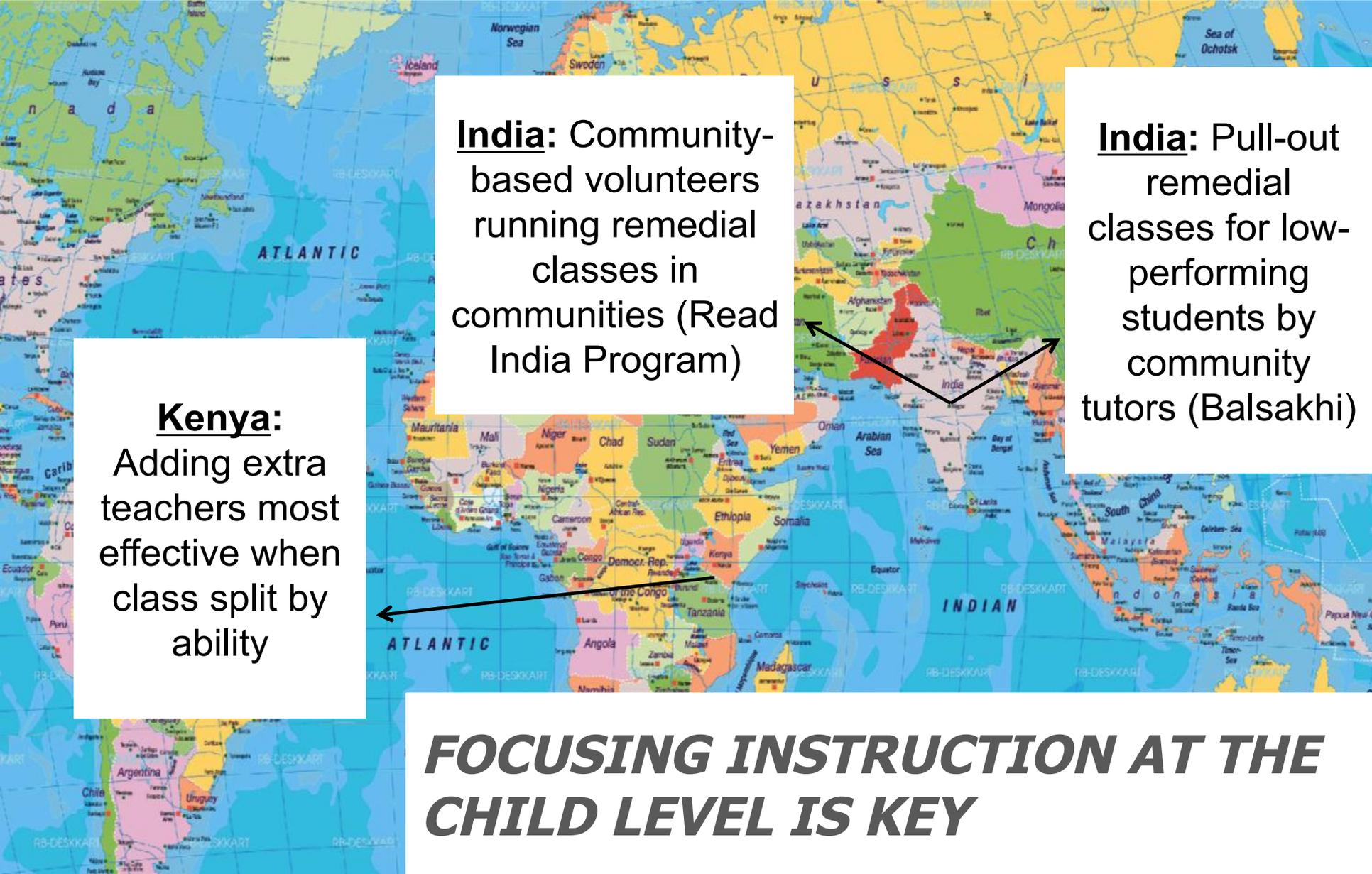
Math



# OUTLINE

- THE PROBLEM
- **WHAT HAVE WE LEARNED?**
- ADAPTING LESSONS TO A NEW CONTEXT
- EVALUATION DESIGN AND IMPLEMENTATION
- ANALYSING AND UNDERSTANDING RESULTS
- NEXT STEPS AND POLICY IMPACT

# WHAT WORKED?

A world map with three white callout boxes. The first box points to Kenya, the second to India, and the third to India. Arrows connect the boxes to their respective geographical locations on the map.

**India:** Community-based volunteers running remedial classes in communities (Read India Program)

**India:** Pull-out remedial classes for low-performing students by community tutors (Balsakhi)

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

***FOCUSING INSTRUCTION AT THE CHILD LEVEL IS KEY***

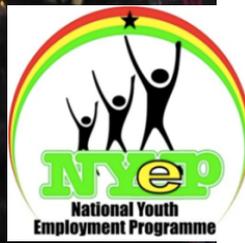
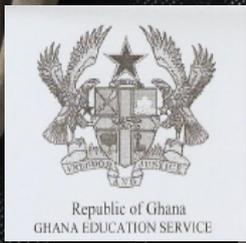
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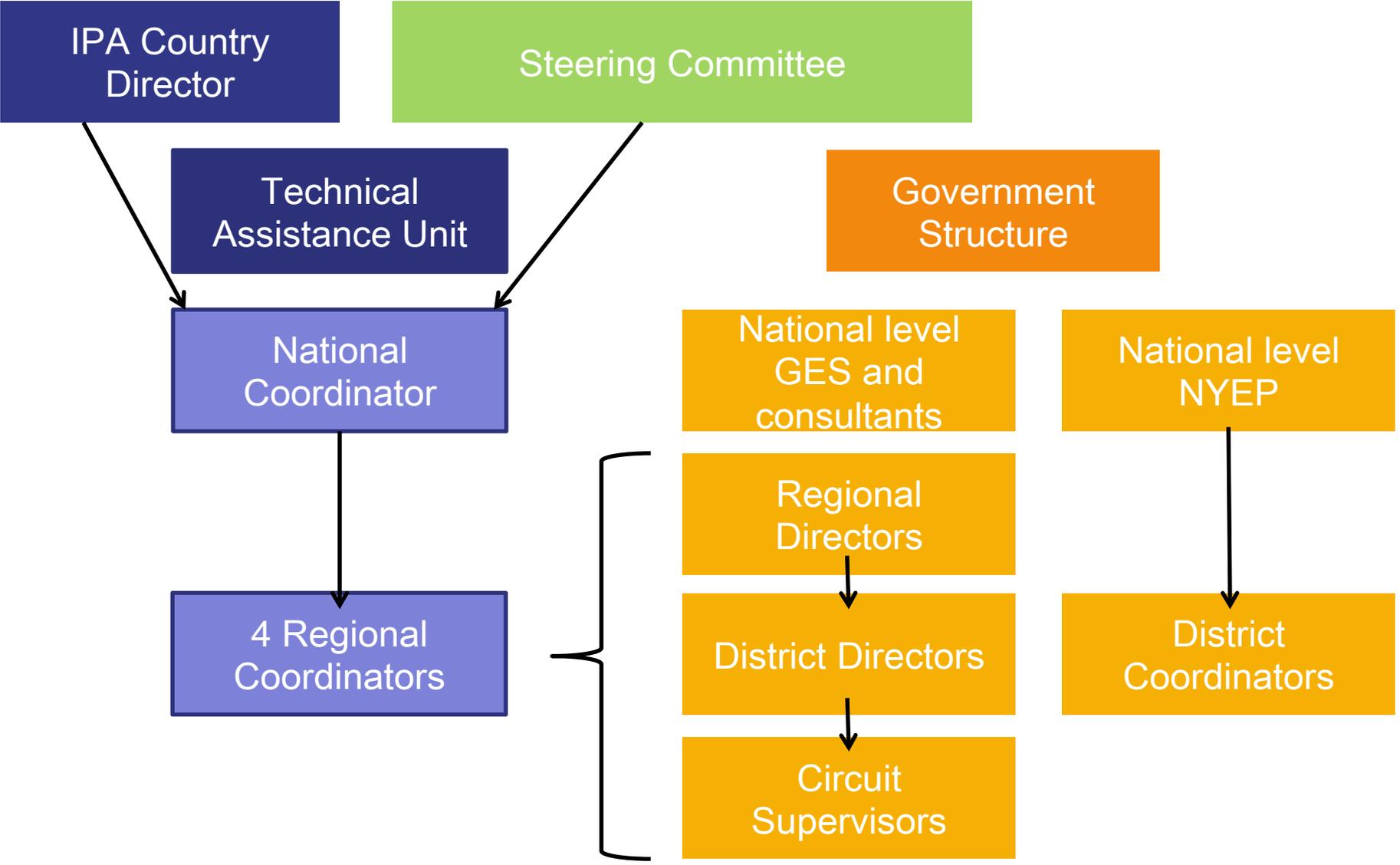
# ADAPTING RESULTS TO A NEW CONTEXT, WITH A VIEW TO SCALE



- Key insights (i.e Theory of change)
- Understand the context
- Political feasibility
- Financial sustainability



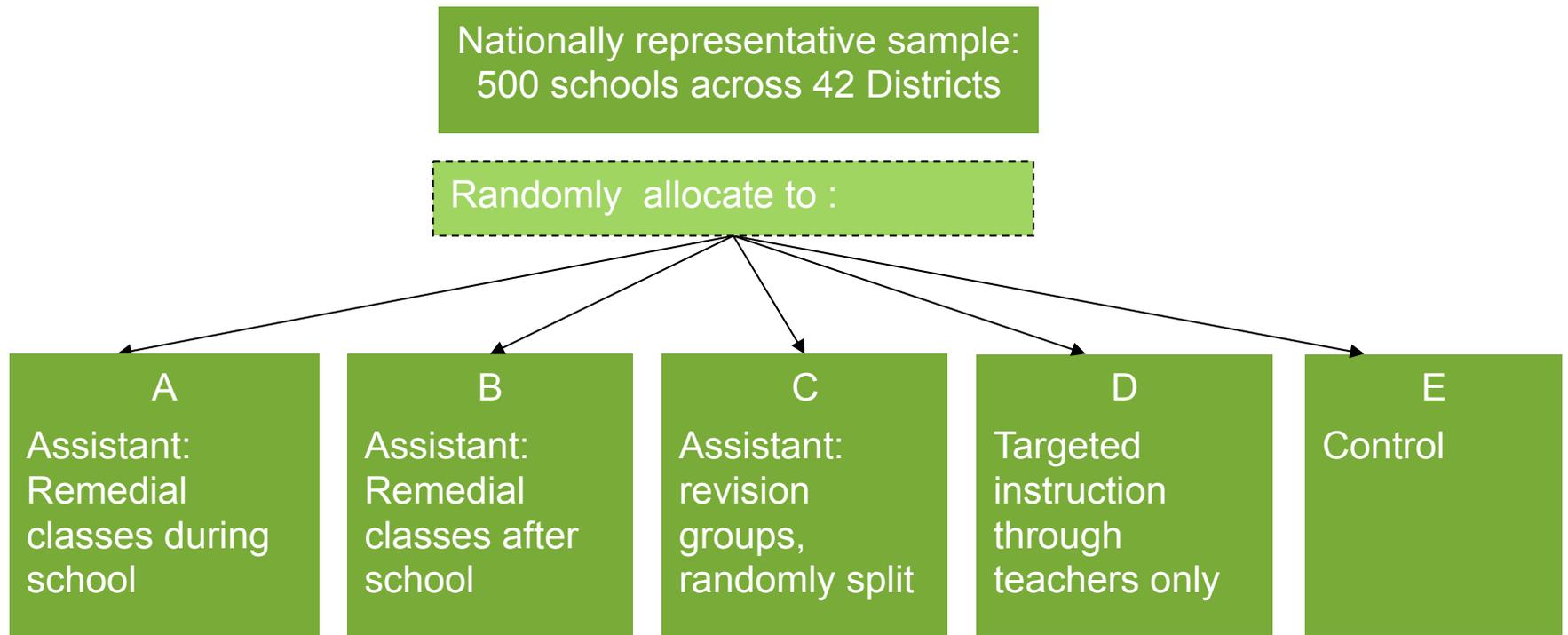
# EMBEDDING AND TECHNICAL ASSISTANCE



# OUTLINE

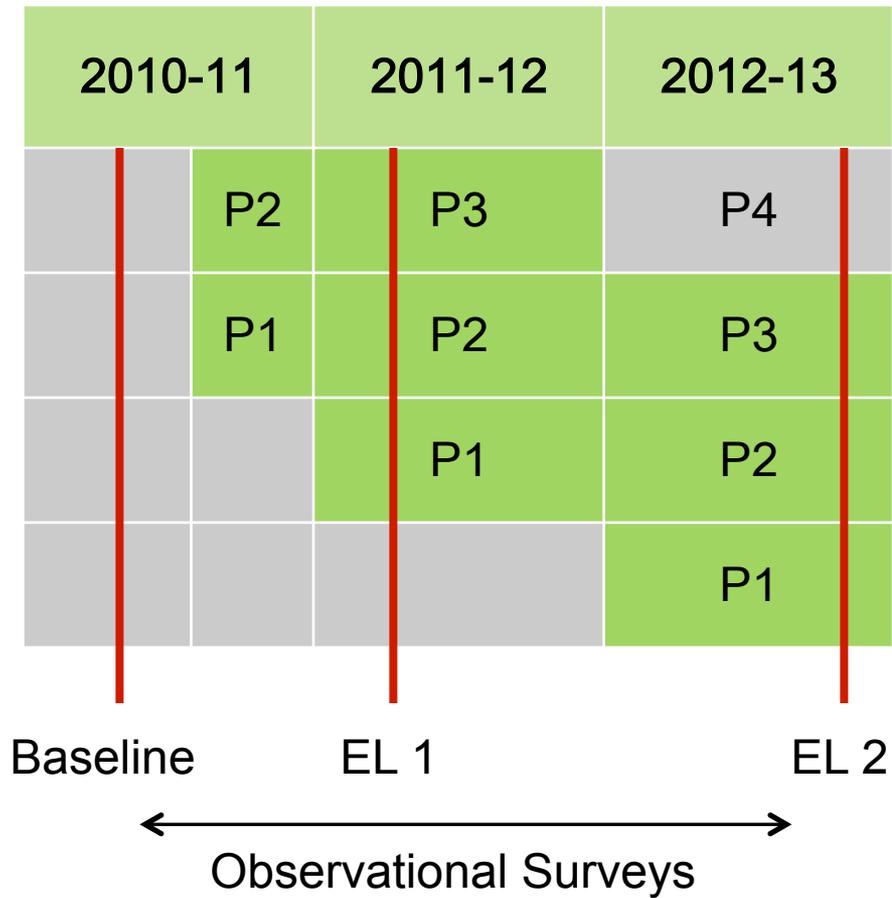
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# EVALUATION DESIGN



A sample of grade 1, 2 and 3 pupils in 500 schools across all 10 Regions, 42 Districts (42,000 children)

# DATA COLLECTION AND COHORTS

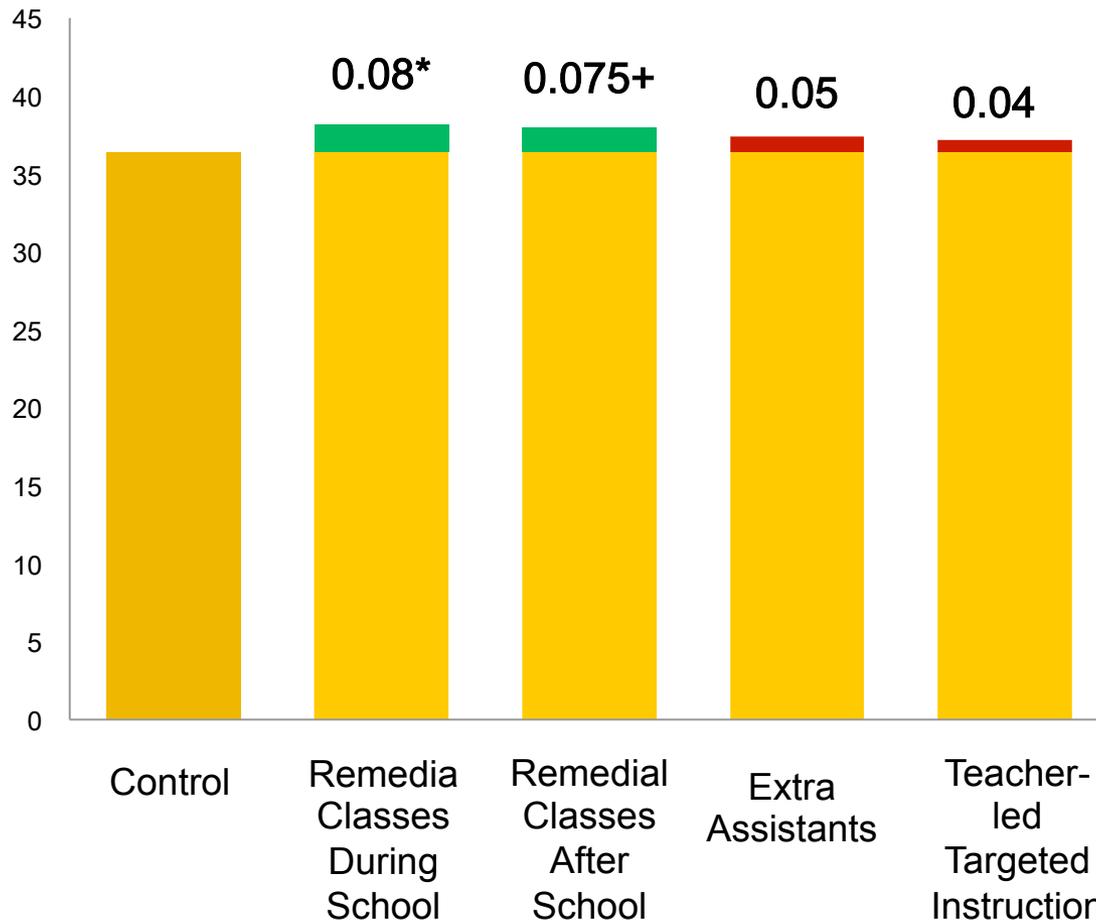


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# OVERALL IMPACTS

Overall Oral Test Scores (SD) :  
P1-P4

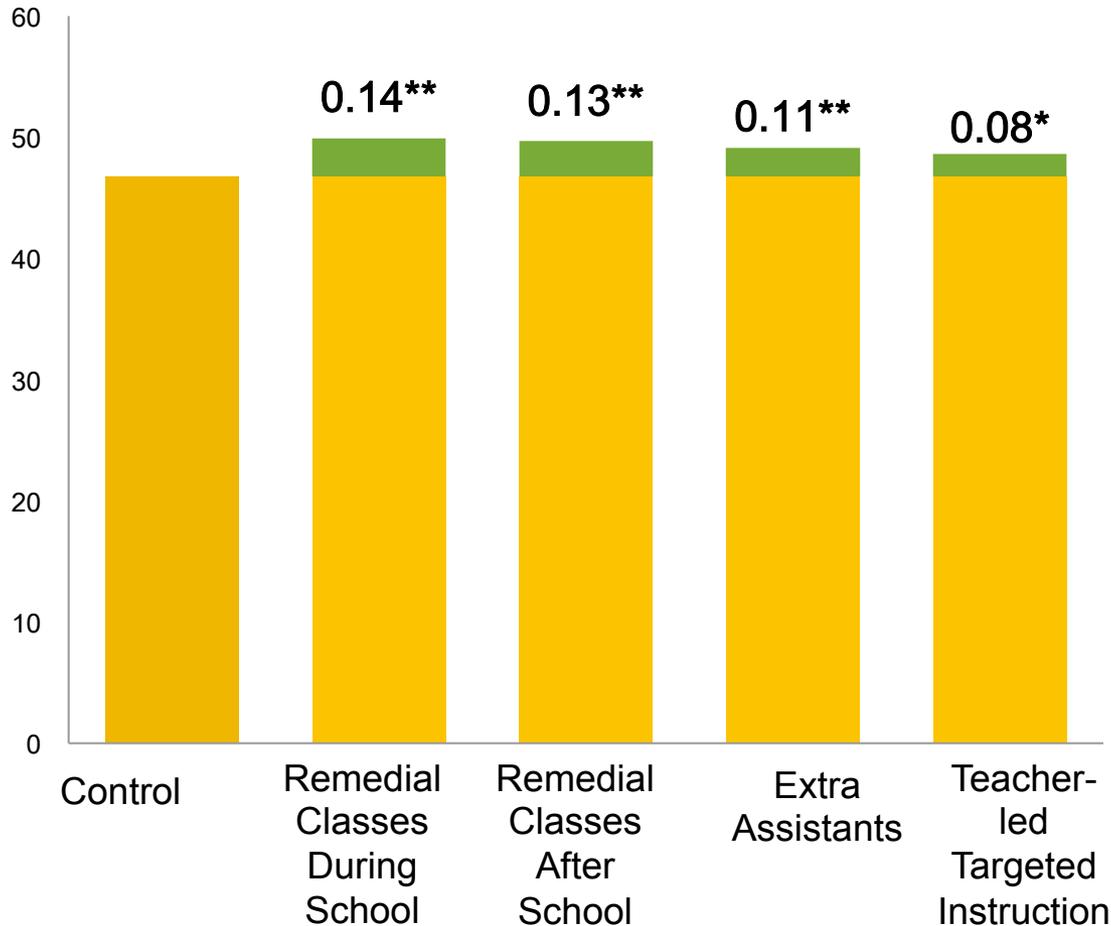


## Targeted Test Sections:

- 0.08 to 0.11 SD
- Positive and significant for Teacher Intervention (0.1 SD)

# IMPACTS DRIVEN BY GRADES 3-4

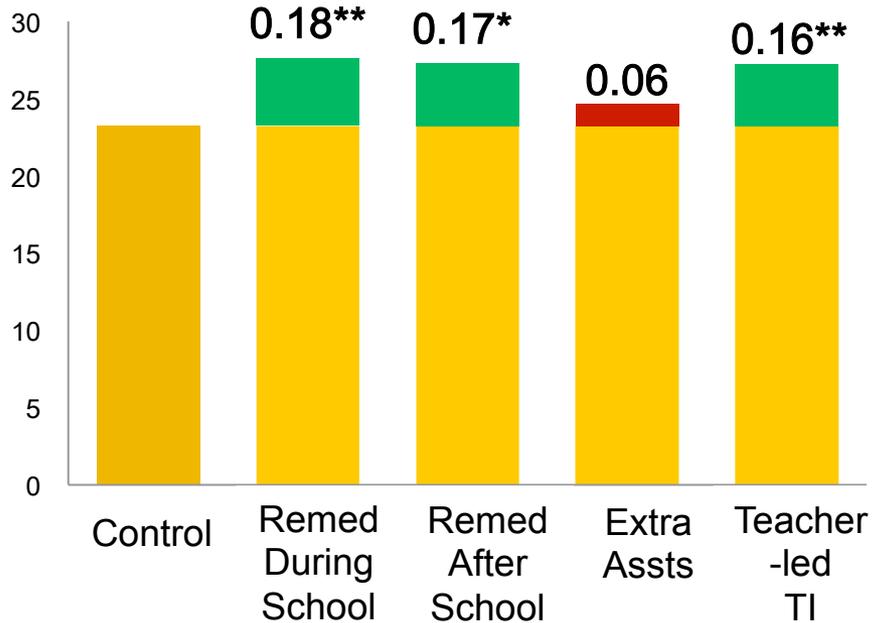
Overall Test Scores (SD) - P3 & P4



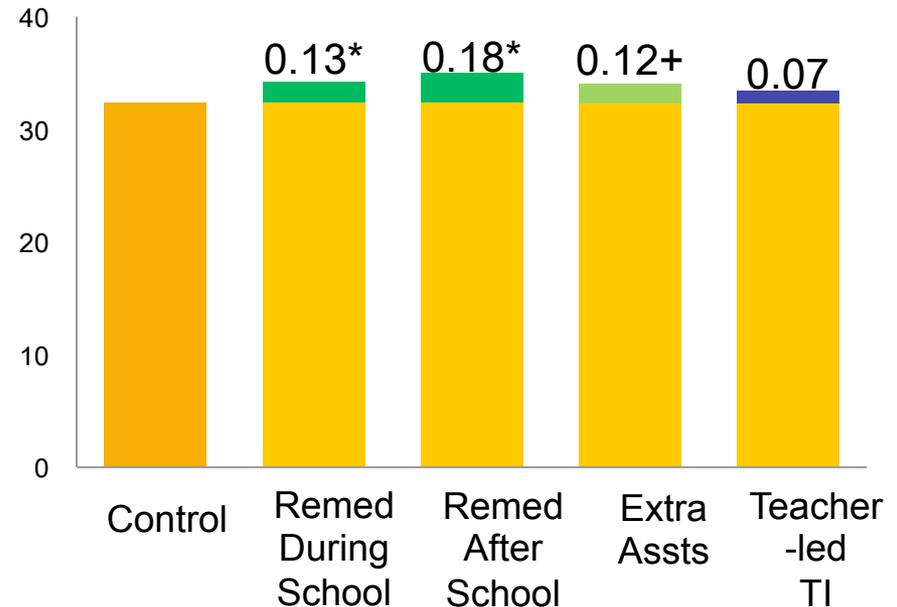
- Effects persist for P4 students, 1 year after intervention's end
- Only 0.02 SD lower than P3 students

# GRADE 3-4: BASIC AND WRITTEN SKILLS

## Local Lang Reading Skills P3&P4 (SD)



## Written Test Scores P3 (SD)

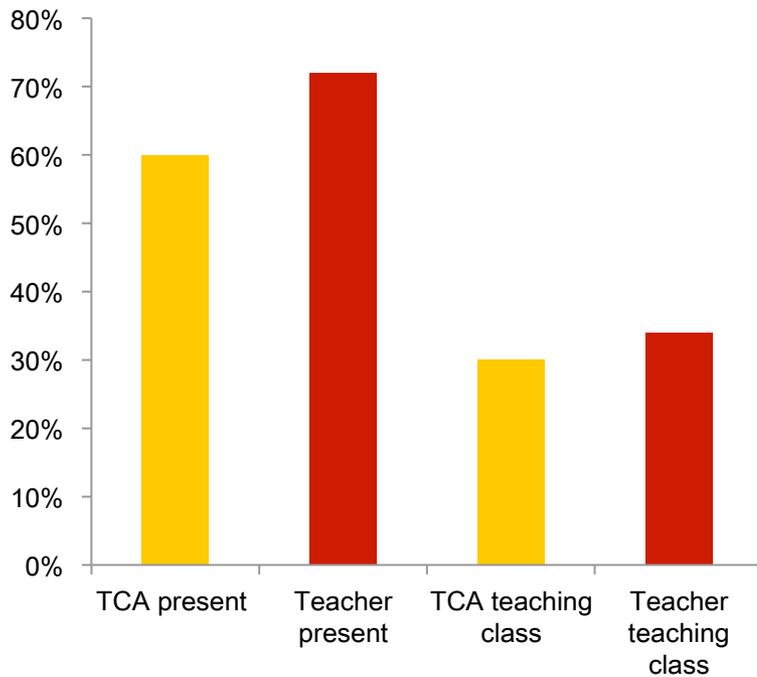


### Targeted Sections:

- 0.12 to 0.18 for Remedial Assistants Interventions
- 0 to 0.09 for Extra Assistants
- 0.08 to 0.17 for Teacher-Led

# DESPITE IMPLEMENTATION ISSUES

## Attendance and Time on Task



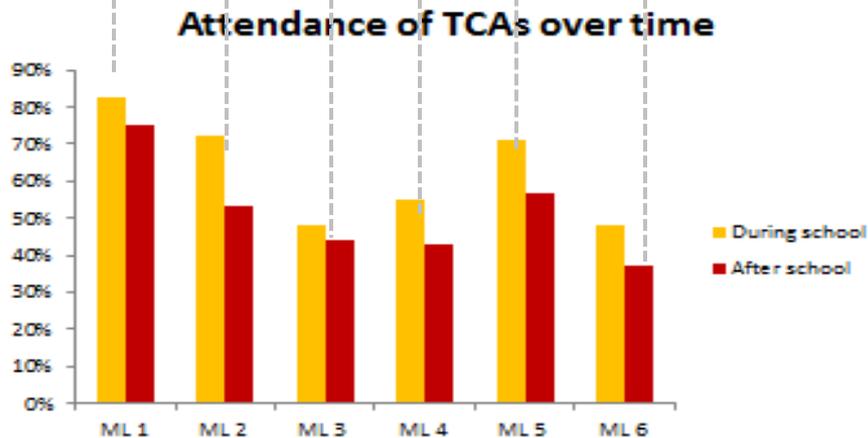
- Assistants absent 40% of time
- Teachers split classes 15% of time



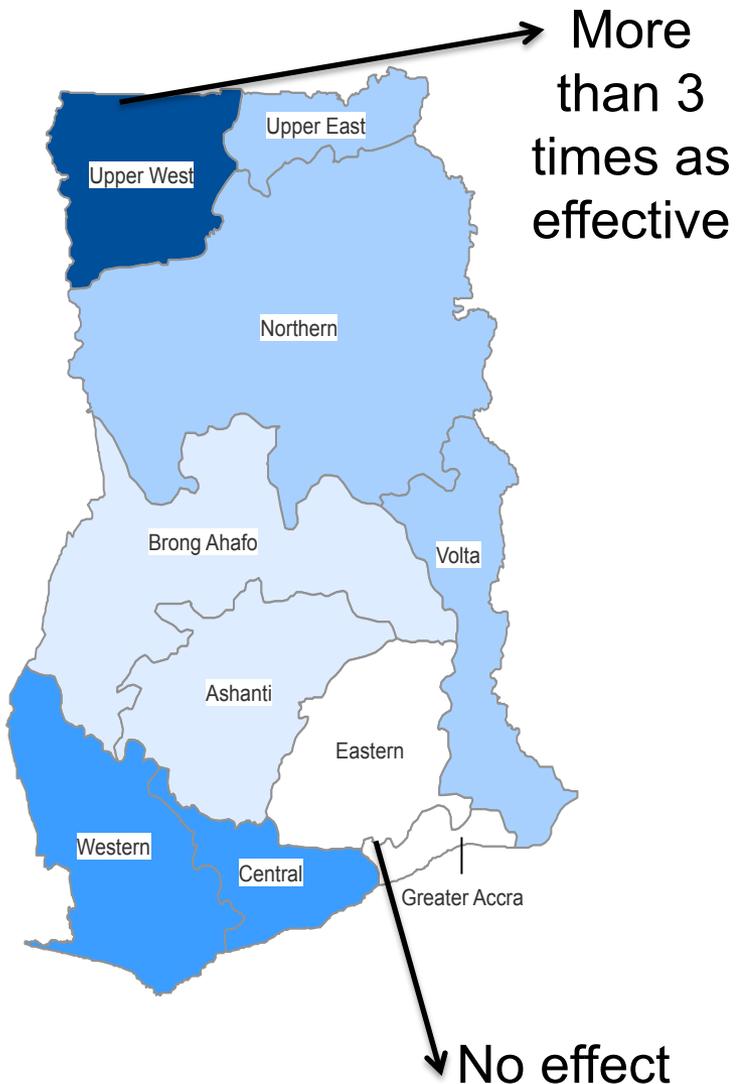
# IMPLEMENTATION OVER TIME

2010-11		2011-12		2012-13		Impact EL2	Impact EL1
	P2	P3	P4				
	P1	P2	P3			0.08	
		P1	P2		0.04		
			P1				

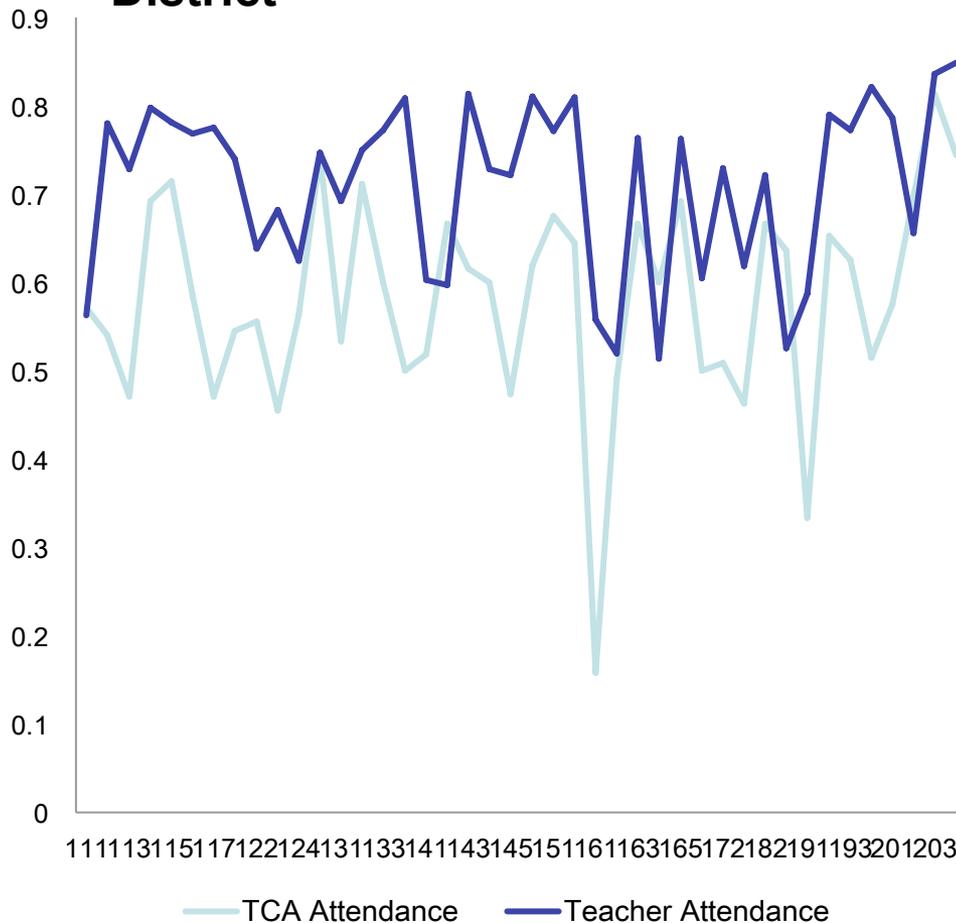
Baseline                      EL 1                                      EL 2



# LARGE REGIONAL VARIATIONS LINKED TO IMPLEMENTATION VARIATIONS



## TCA vs. Teacher Attendance by District



# DURING OR AFTER SCHOOL?

## Schools with multigrade teaching

- Mostly depends on the school environment
  - Multigrade
  - Likelihood of class taking place?

	All	English	Loc Lang	Math
During school	0.30*	0.26*	0.43*	0.34*
After School	0.21*	0.17*	0.26*	0.17*

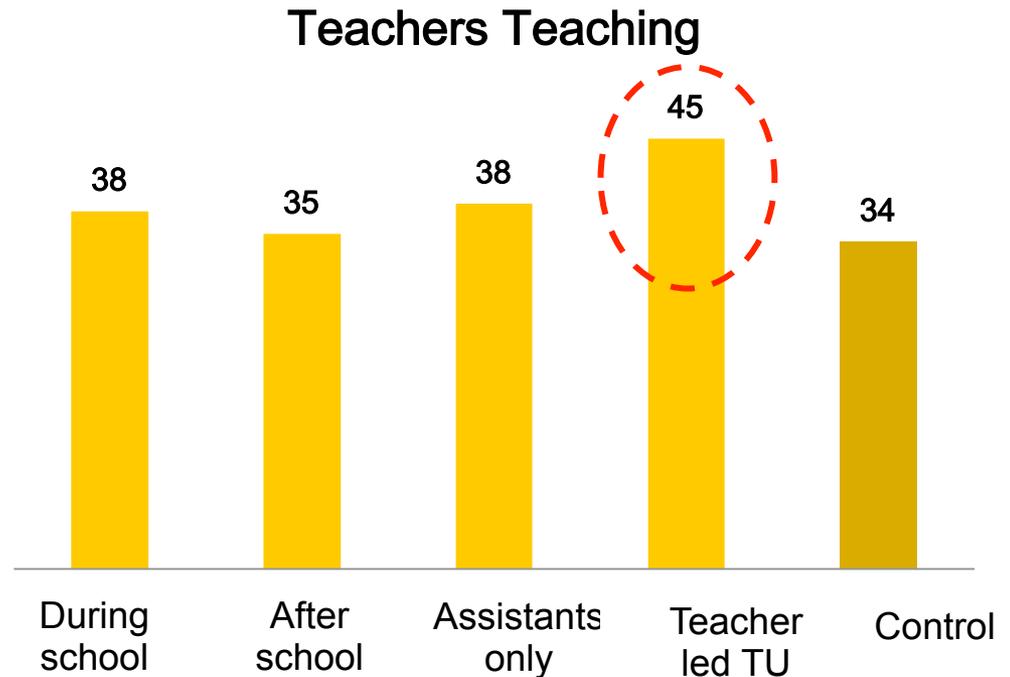
- After school works better for girls than boys
  - Up to 0.13 SD
  - Works for girls in P1-2

## Schools with no unused classroom at baseline

	All	English	Loc Lang	Math
During school	0.12**	0.13**	0.11	0.1+
After School	0.14**	0.16**	0.14+	0.1*

# TEACHER-LED TARGETED INSTRUCTION

- Teachers teach more often
- Modest Effects, especially on literacy
- But changing practices is difficult
- Enforced TI 15% of the time



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# WHAT'S NEXT?

- **Policy Engagement:**
  - Embedding Targeted Instruction Concept into the System
- **Up Coming Research:**
  - Increasing Teachers' Enforcement of Targeted Instruction through Enhanced Supervision



# EMBEDDING EVIDENCE: LESSONS

- *Perception of context differences:*
  - Exposure trips are useful
- *Politics:* Many factors influence the decision to adopt a program or not
  - All stakeholders need to be involved
- *Project vs policy:* embedding successful ideas into the system
  - Important to leverage existing systems and to link to government plans/priorities
- *Policy Engagement.* This requires an active engagement and an iterative process
- *Implementing and Monitoring at scale:* difficult
- *Local variations:* Nation-wide policies or interventions can take them into account



**THANKS!**

