


Every child is a National Asset



EGRS

EARLY GRADE READING STUDY

Re aga motheo



basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA



Read to Lead
A Reading Nation is a Leading Nation

The development of reading Change in education research and practice

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Overview

- Emergence of the change model
- Putting the evidence together
- Next steps

International Change Knowledge

International Tests used as a catalysts

- Change strategies often triggered by international test results or national attention generated on the weaknesses of the education system

Focus on Literacy and Numeracy

- Basic knowledge and skills in reading, writing, and mathematics, and the natural sciences
- Narrowing of the curriculum, deemphasises on arts and other subjects

National Targets

- Political identification of national numerical targets attached to the political cycle

External Assessment and Accountability

- Measure change learner outcomes at multiple units with rewards and sanctions attached to meeting targets

Prescriptive Curriculum

- Tightly prescribed lessons aligned national curriculum

Standardized Learning Materials

- Provision of centrally procured and quality learning materials to all learners

Professional Development

- This takes a variety of forms from conventional short-course, just-in-time training to site-based coaching

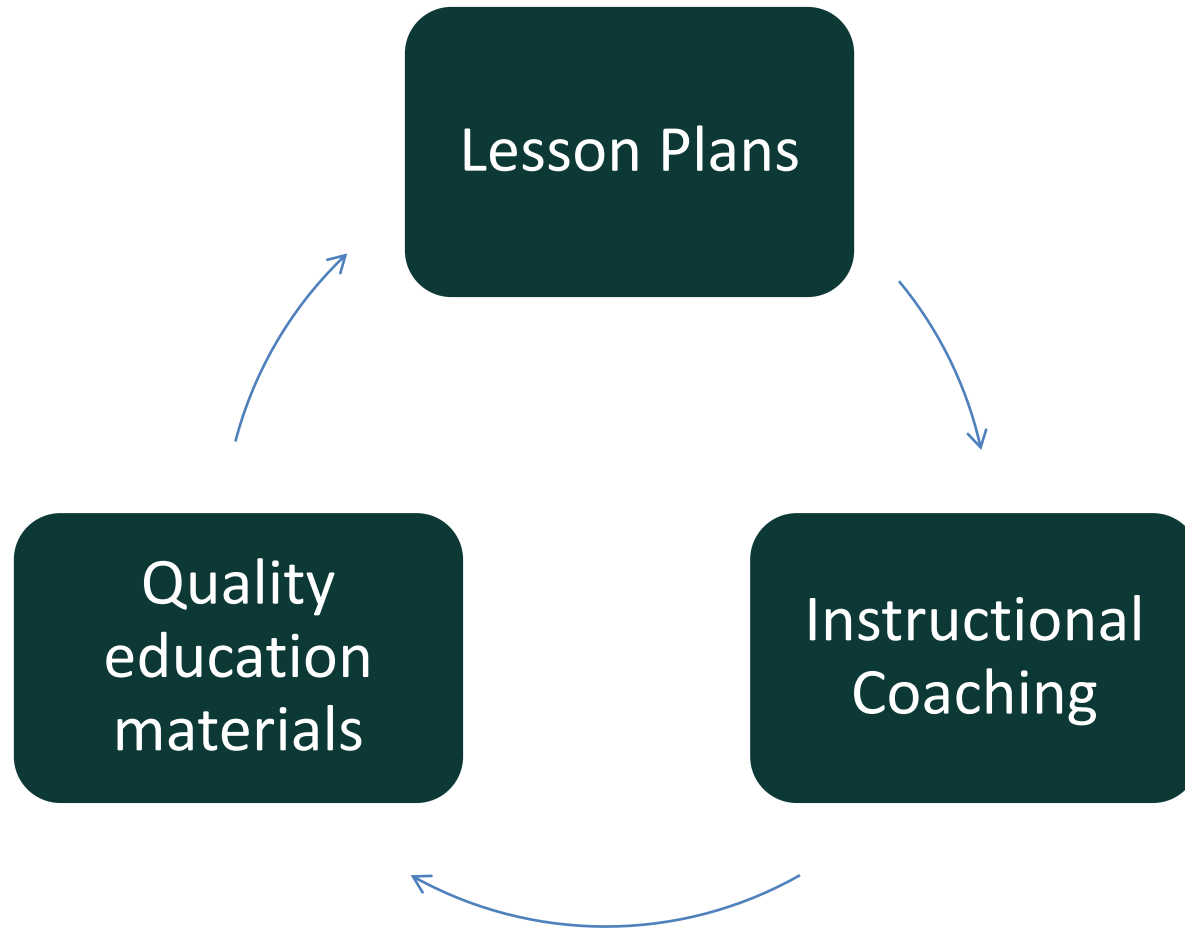
Models of Education Improvement

Model A



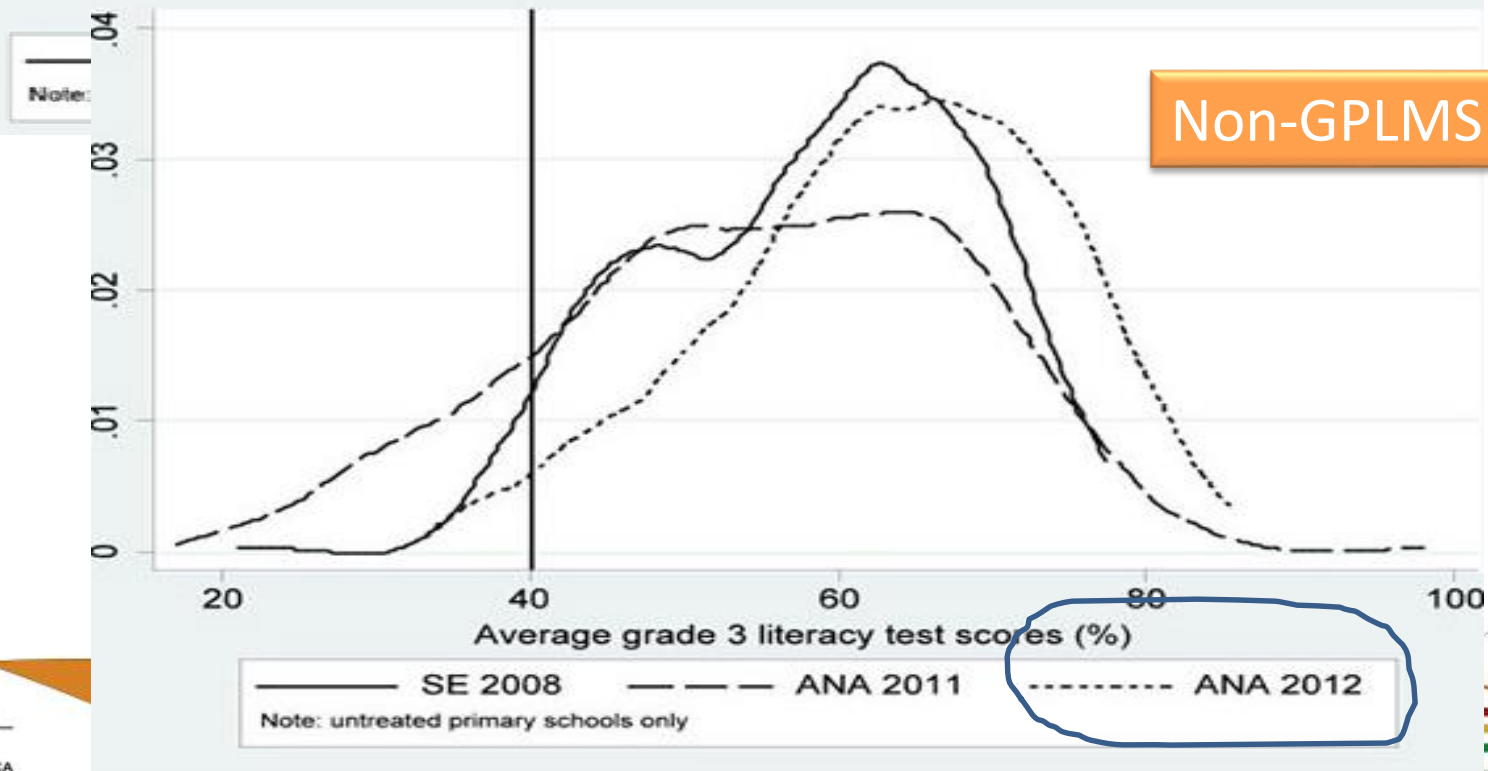
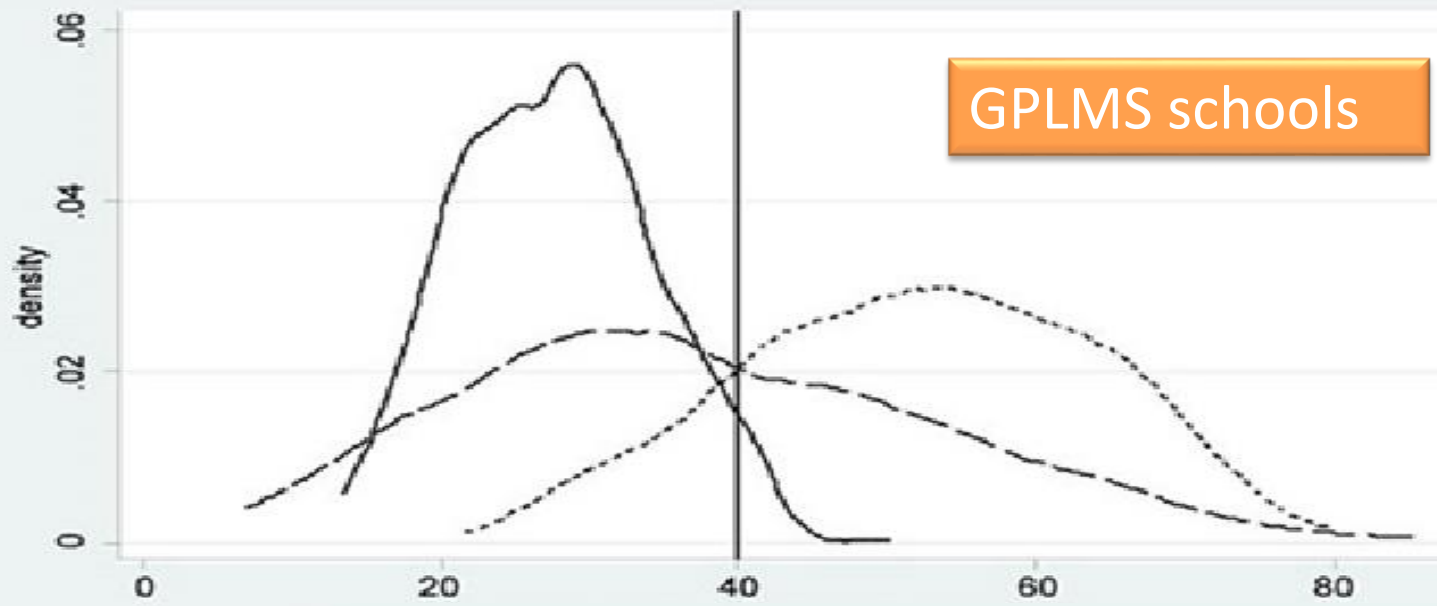
Model B

Emerging SA intervention model



Name of Study	Acronym	Research Method	Time-frame	Focus	Sample Size
Gauteng Primary Literacy & Mathematics Strategy	GPLMS	Quasi-RDD, natural experiment	2011-2014	primary school literacy & mathematics	1040 schools
Reading Catch-up Study	RCUP	RCT	2014	Gr 4 remedial program in English-10 weeks	100 schools
Early Grade Reading Study I & extension	EGRS I	RCT, qualitative case studies	2015-2016	Gr 1 -2 Setswana literacy	230 schools
Early Grade Reading Study I Expansion	EGRS I	RCT	2017	Gr 3 Setswana literacy	180 schools
Early Grade Reading Study II	EGRS II	RCT	2016-2018	Gr 1-3 English literacy	180 schools

GPLMS and non-GPLMS, ANA 2012



GPLMS and non-GPLMS, RDD study

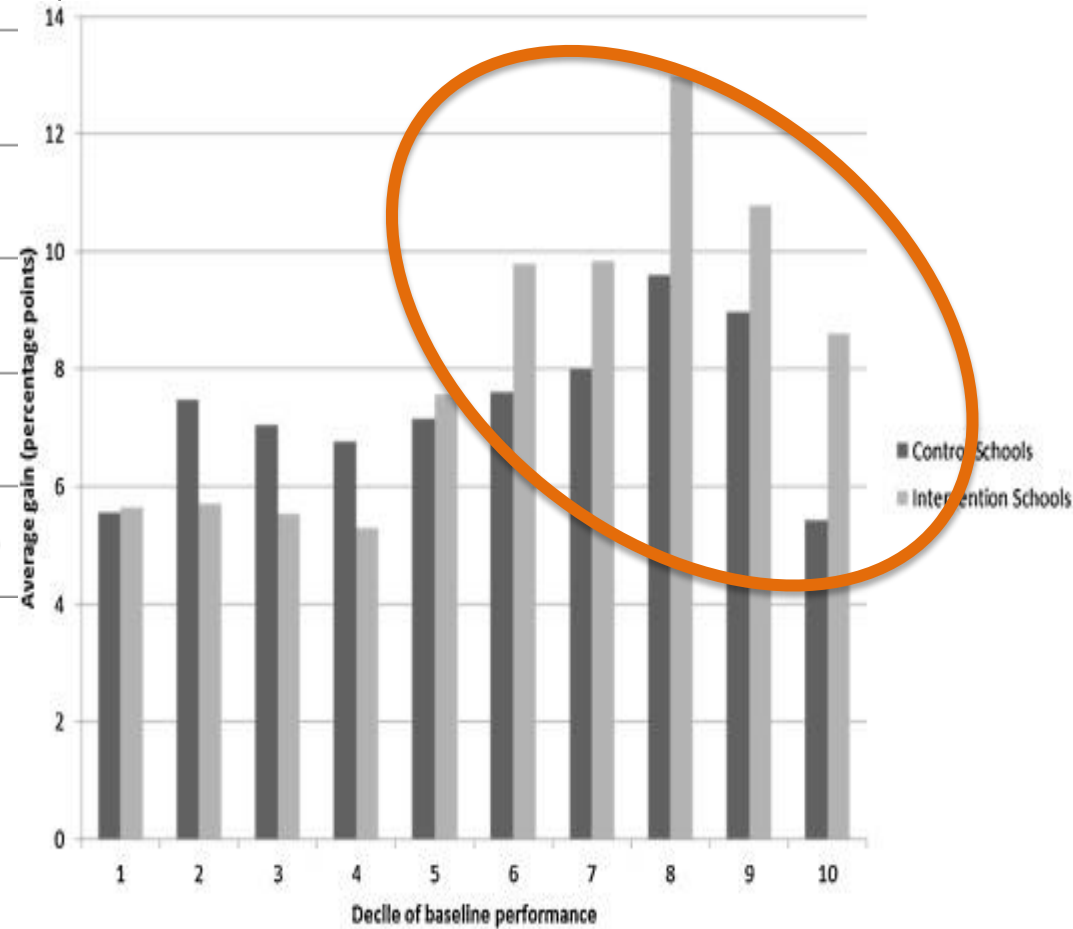
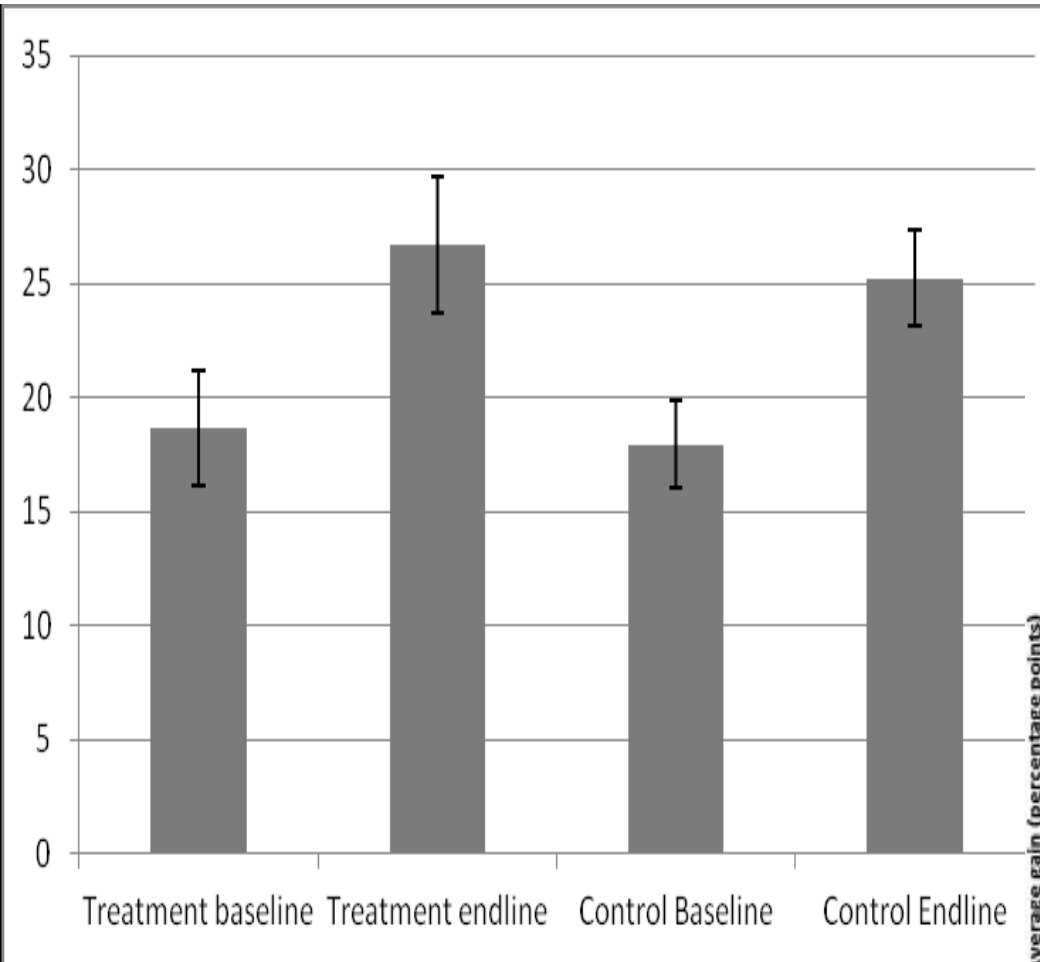
	Sample of schools around assignment threshold (36-44%)			
Grade 3	Non-GPLMS	GPLMS	Difference	Standard deviation
2008	45.1	44.5	-0.6	18.8
2011	36.7	36.5	-0.2	15.6
2012	42.2	49.1	6.9**	14.4
2013	51.2	61.0	9.7***	14.1

Source: Fleisch et al 2016; Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Percentage Learners $\geq 50\%$ Verification ANA, 2014

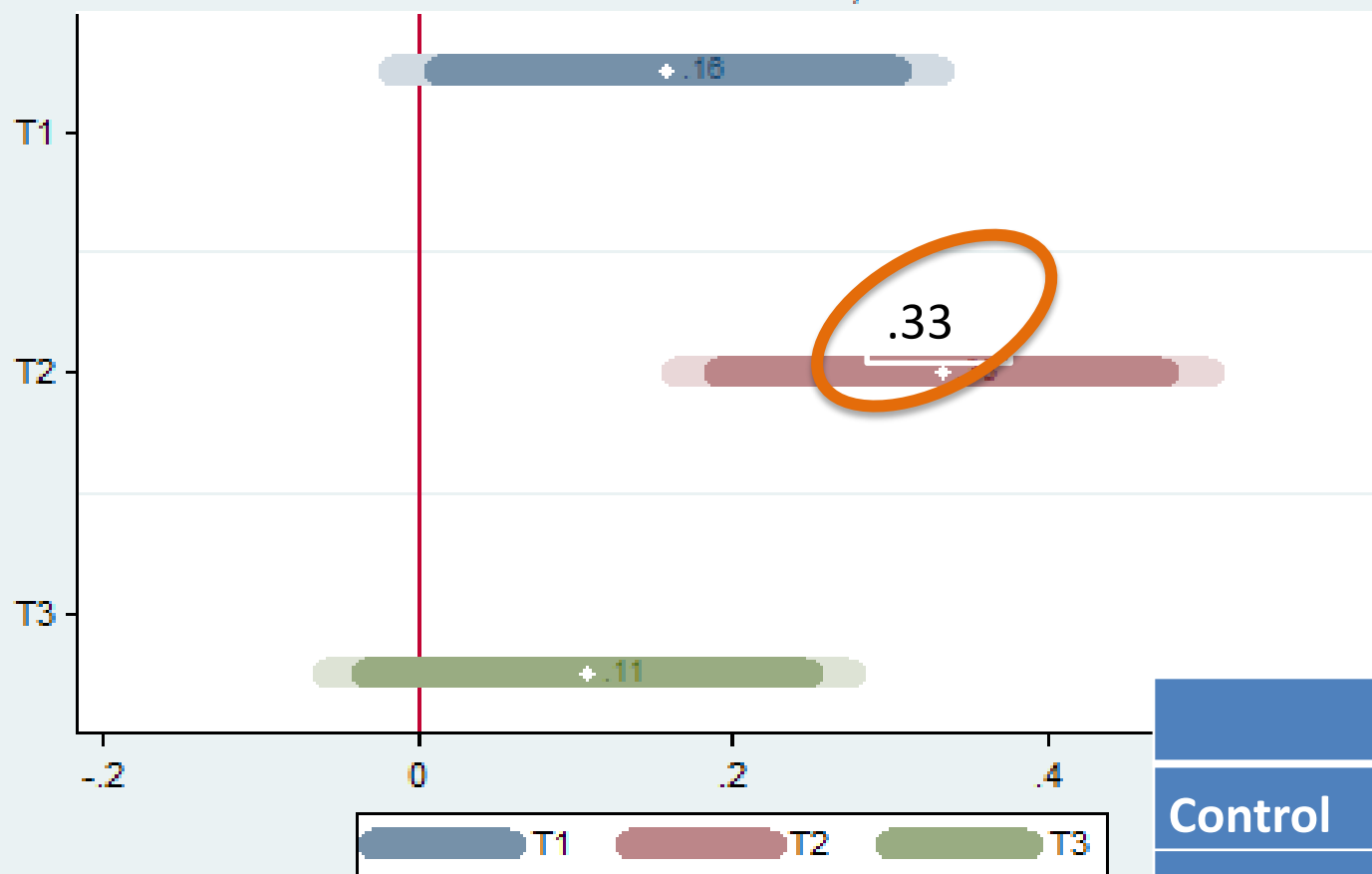
	Gr 3		Gr 6		
	Math	Lang	Math	HL	FAL
Eastern Cape	52.3	51.0	22.0	53.7	24.2
Free State	65.2	64.8	41.0	69.3	45.3
Gauteng	73.6	70.5	53.1	90.7	58.2
Kwa-Zulu Natal	56.4	56.7	31.4	73.3	32.1
Limpopo	33.6	42.5	15.9	54.6	24.0
Mpumalanga	54.9	56.6	27.1	83.8	34.9
Northern Cape	48.9	44.8	24.4	63.1	28.8
North West	39.4	51.2	20.0	74.5	31.6
Western Cape	68.0	64.2	44.9	79.9	52.2
National	55.6	56.5	32.4	74.6	36.1
Diff GP and next highest	+5.6	+5.7	+8.2	+6.9	+6.0





RCUP study - Pinetown, 2014

Treatment coefficients, 90 & 95 CI



	Letter	Words	Parag
Control	41.9	21.0	27.5
Training	41.7	21.8	29.2
Coaching	47.6	25.7	34.6
Parents	42.6	20.4	27.2

Early Grade Reading Study, 2017

Making a difference

Improvement in maths

Standard deviations

Computer-aided learning interventions

Remedial games, year 2 (2007)

Tech-aided after-school scheme (2016)

Remedial games, year 1 (2007)

Algebra software (2002)

After-school revision software (2008)

Other interventions

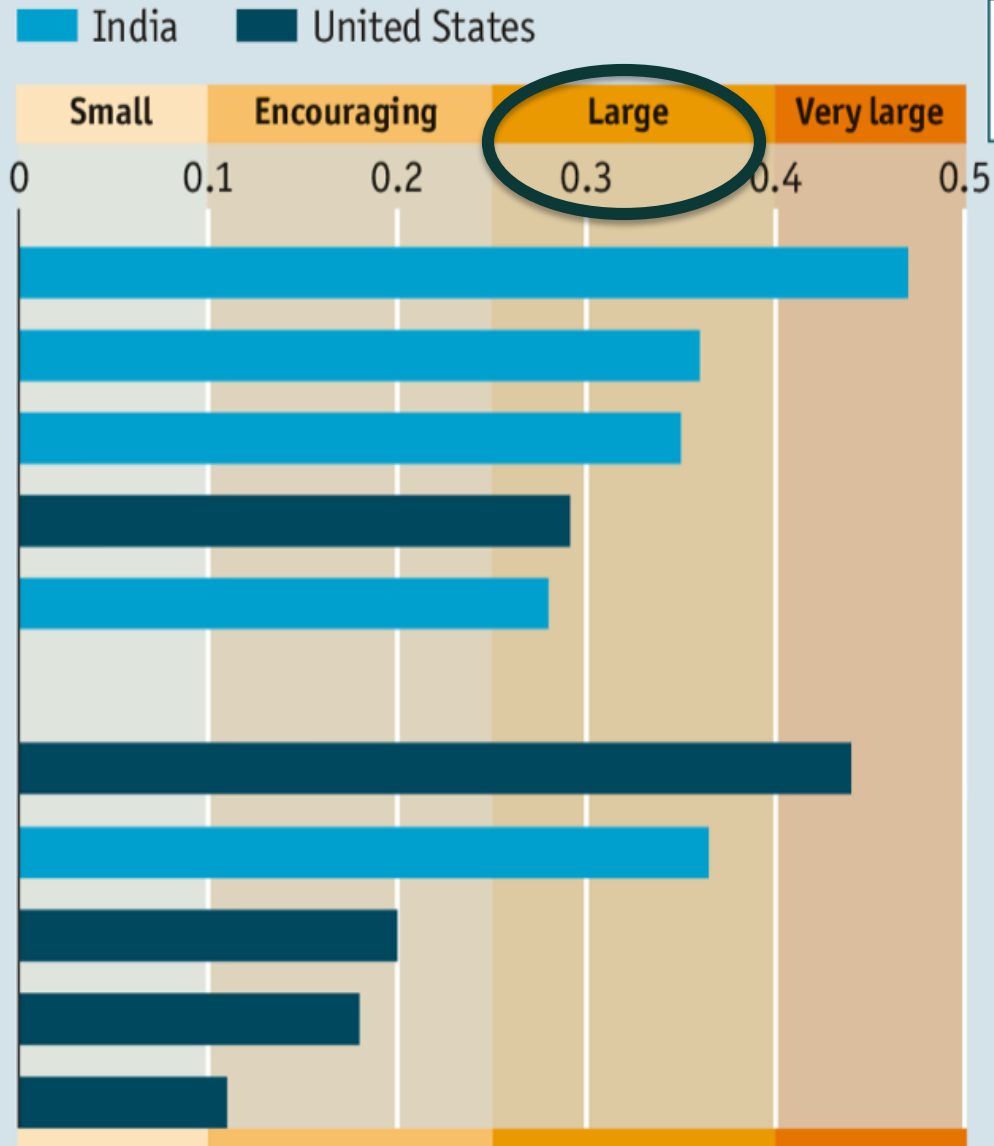
Intensive tutoring including cognitive behavioural therapy* (2014)

Remedial group instruction (2007)

Class size reduction (1995)

Prolonging the school day* (2014)

Intensive tutoring* (2015)



Source: J-PAL North America

*Average of range

What have we learnt?

- The SA intervention model works ✓
- It works at-scale in rigorously trials ✓
- It works in both urban and rural provinces ✓
- It works for early reading HL (numeracy and EFAL) ✓
- Its impact is 'large' ✓
- The coaching component is critical ✓
- It can be rolled out province-wide within provincial budgets ✓

What else does the evidence tell us . . .

- We have limited evidence that the model works as a short-term intervention and as an intervention beyond the Foundation Phase
- There is some evidence that within priority schools, the intervention model appears to work best for academically stronger learners (and boys)
- The intervention does not impact all schools to the same degree

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Next steps



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The next generation of research questions . . .

- How could we improve on the intervention model?
 - How can we improve the lesson plans, educational materials and coaching?
 - Should we add additional components, e.g. reading assistants, books?
 - Can we modify the model to make it more effective in underperforming schools?
- What system constraints exist for scaling-up?
 - What changes need to be put in place to ensure policy alignment and coherence?
 - N&S for class-size, LTSM and teacher development?
- What would it cost to implement the intervention model system-wide?
 - Could the cost be accommodated in existing provincial budgets?
 - Are there less expensive models of one-on-one coaching?
- What interventions would we need to go to the next level of learning outcomes?
 - How would improved instruction and learning outcomes in the Foundation Phase impact instruction in the Intermediate Phase?

