

Every child is a National Asset



Moving toward cost-effective delivery models of Teacher Coaching: Evidence from field experiments in South Africa

RISE Conference
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Why Early Grade Reading?

- 78% of South African Grade 4 learners could not reach the lowest benchmark in the HL
- The majority of South African children transition to English as language of instruction in Grade 4.
- This means that the majority of learners cannot engage critically with text in later grades
- This no doubt feeds into the **substantial inequalities** in educational achievement that are established early in primary school.

Early interventions aimed at improving the acquisition of English as an additional language can be expected to have larger effects than interventions later in the school programme.

Background:

- Structured learning programmes seem to be successful in improving:
 - Instructional change
 - Learning outcomes (Snilstveit *et al*, 2016; Popova, Evans, & Arancibia, 2016).
- Within structured learning programmes - mode of delivery matters (Popova, et al., 2016).
- On-site teacher coaching seems to be quite successful (Kraft, et al., 2016).

First research question: Is this replicable in the South African context?

Reading Catch-up Study (RCUP):

- On-site teacher coaches over a short period of time (11 weeks)
- **Aim:** to boost the teaching and learning of English Second Language reading amongst Grade 4
- **Evaluated:** RCT design in the Pinetown district of the KwaZulu-Natal province
- If effective, this could be implemented in a cost-effective manner through rotating coaches across schools for one term at a time.
- **BUT:** the average impact of the RCUP was not significantly different from zero
 - Although children with a higher baseline English proficiency did register statistically significant gains

2 lessons learnt:

#1: Learners lack the foundations, so we need to intervene prior to Grade 4.

#2: The duration of coaching was too short, we need to intervene for at least 2 years

First Early Grade Reading Study

3 Interventions targeting HL literacy (Setswana) in no-fee schools

<p>Control group (80 schools)</p>	<p>“Training” Lesson plans, reading materials + central teacher training (50 schools)</p>	<p>“Coaching” Lesson plans, reading materials + on-site coaching (50 schools)</p>	<p>“Parent Involvement” (50 schools)</p>
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	Training	Coaching	Parents
Total annual cost for 50 schools	\$113,850	\$160,000	\$84 600
Per learner annual cost	\$30.58	\$42.91	\$22.75

2015: Grade 1

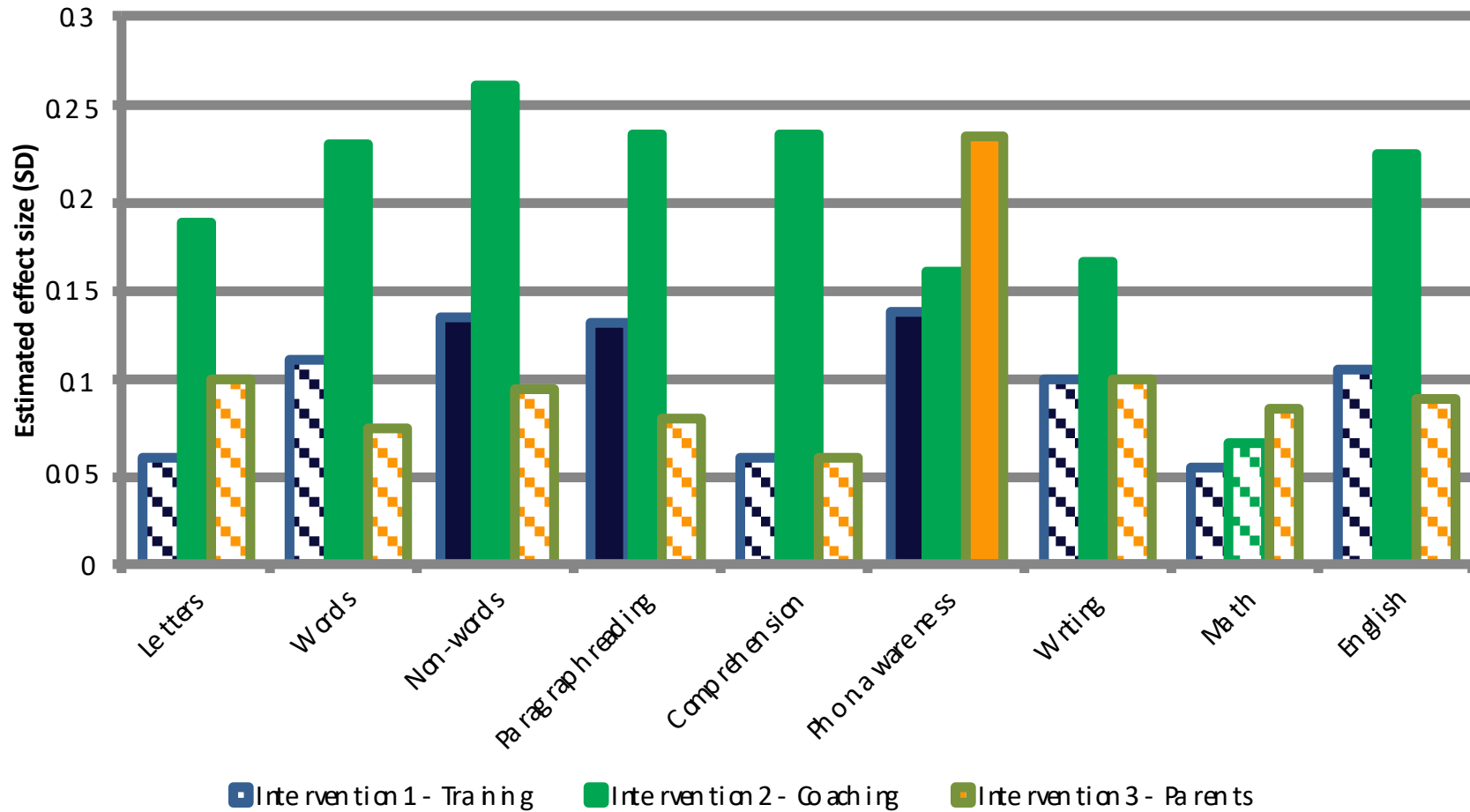
2016: Grade 2

2017: Grade 3 (Interventions 1 and 2 only)

EGRS I: Impact after 2 years



EGRS I: Impact after 2 years



EGRS I: Changed instructional practices

- Teachers felt much more supported
- Higher access to print and adherence to teaching routine
- Increase in group-guided reading (individualized reading)
- Curriculum coverage, assessment and opportunities to write
- Pupil use of reading material

EGRS I: Lessons learnt



Structured learning programmes seem to be successful in improving:

- Instructional change
- Learning outcomes

Within structured learning programmes - mode of delivery matters

On-site teacher coaching seems to be quite successful

But expensive + resource intensive

Next generation questions:

- **Are there more cost/ resource effective modes of delivery?**
- **Is this approach replicable in another province or subject?**

Second Early Grade Reading Study

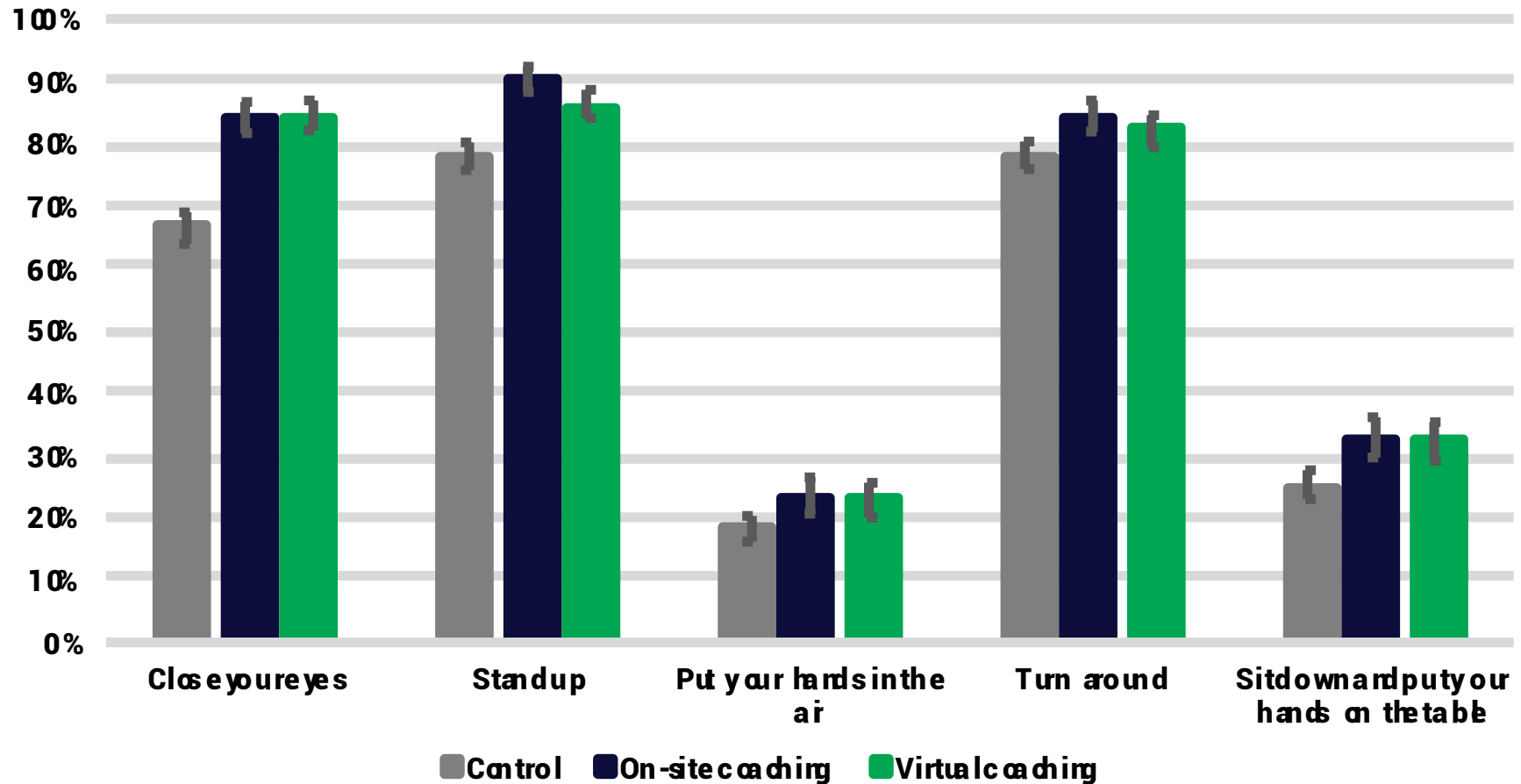
2 Interventions targeting EFAL literacy (English) in no-fee schools

<p>Control group (80 schools)</p>	<p>“On-site coaching” Paper-based lesson plans Reading materials + On-site coaching (50 schools)</p>	<p>“Virtual coaching” Tablet based lesson plans Reading materials + Virtual coaching (50 schools)</p>
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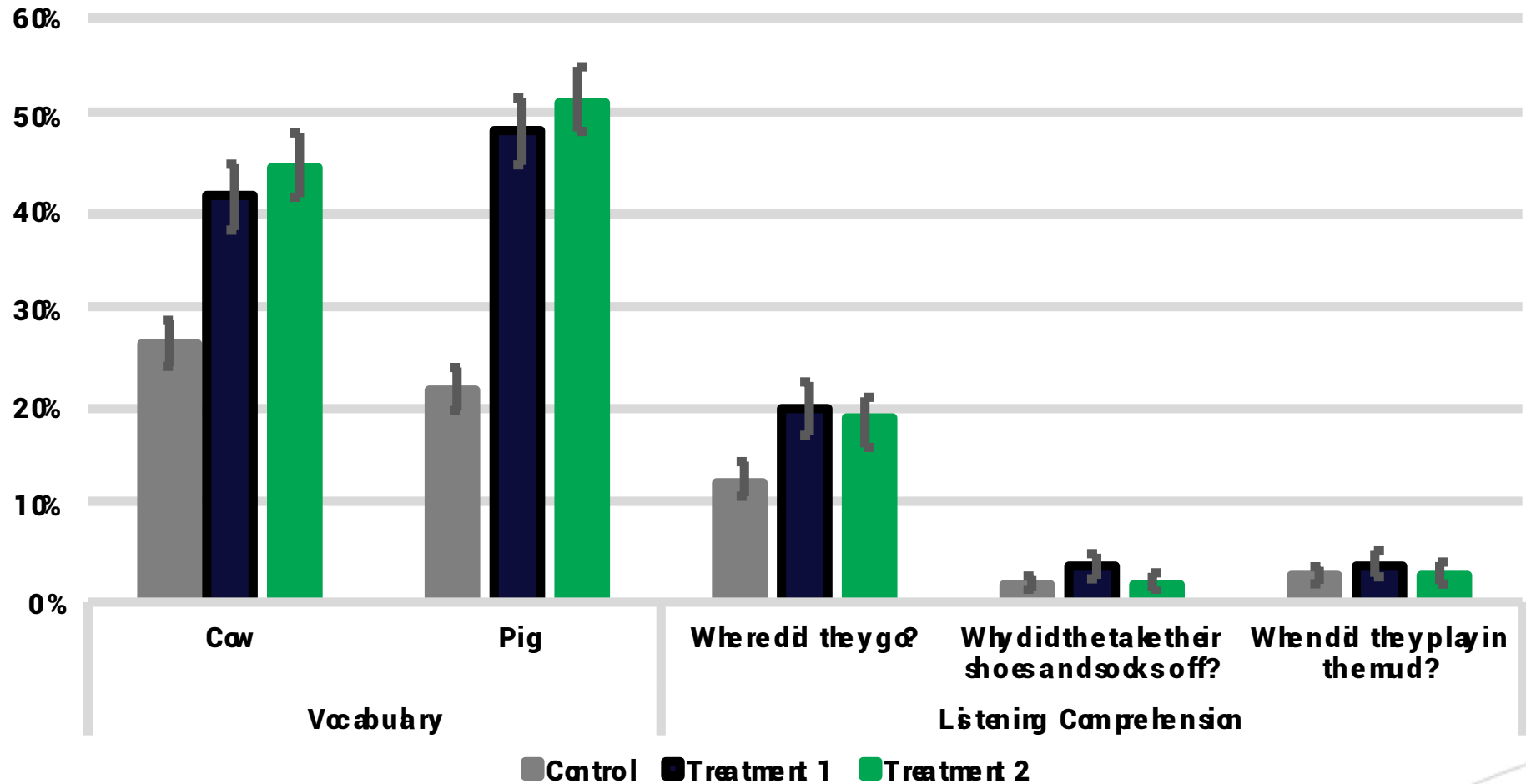
	On-site coaching	Virtual Coaching
Total annual cost for 50 schools	\$182,920	\$164,60
Per learner annual cost	\$47.64	\$42.88

2017: Grade 1
2018: Grade 2
2019: Grade 3

EGRS II: Preliminary learner outcomes (after 1 year)



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EGRS II: Preliminary learner outcomes (after 1 year)

	HL Vocabulary	HL Words	ESL PA	ESL Letters	ESL Words	ESL Listening	ESL Compre- hension	ESL Vocabulary	ESL Writing
On-site Coach	-0.122** (0.055)	-0.139 (0.087)	-0.079 (0.092)	-0.052 (0.088)	0.001 (0.079)	0.375*** (0.083)	0.190** (0.075)	0.518*** (0.073)	-0.015 (0.077)
Virtual Coach	0.016 (0.056)	-0.162* (0.083)	-0.170* (0.094)	-0.180** (0.077)	-0.103 (0.069)	0.291*** (0.083)	0.105 (0.065)	0.547*** (0.073)	-0.082 (0.066)
N	3,038	3,037	3,037	3,039	3,034	3,034	3,034	3,032	3,028
R ²	0.021	0.140	0.132	0.140	0.110	0.149	0.057	0.208	0.113
P-value	0.0255	0.798	0.371	0.139	0.202	0.343	0.314	0.704	0.352

Listening and Speaking improved in line with the curriculum expectations

EGRS II: Changed instructional practices

- Predominant use of English by teachers and learners
- More opportunities for learners to speak English individually
- Teachers used a much broader variety of instructional practices
- Teachers are more likely to introduce vocabulary in context
- More English print visible (posters/charts/books etc)

Discussion

Very preliminary results:

- On-site coaching can work in another province and language
- Virtual coaching might be a less resource intensive mode of delivery
- Will have to see whether these finding holds after year 2

Next generation research questions:

- **Is the impact sustainable on both a learner and teacher level?**
- **Can the on-site coaching model be delivered on a larger scale?**

Next steps: Research agenda

EGRS I extension:

- 2019-2020
- All schools in 2 districts
- Both Home language and English First Additional Language
- Evaluating sustainability:
 - Learner level
 - Teacher level

Next steps: System change

EGRS Improvement Plan

- National evaluation framework – Cabinet holds DBE to account
- Consider the exact actions necessary to implement
 - Oversight committee
 - Developing the scripted lesson plan + LTSM templates
 - Developing a coaching course + norms and standards for employing coaches
 - Developing norms and standards around dosage and quality of implementation
 - Finding a way for provinces to finance implementation
 - Further research questions.