Early Grade Reading Studies

Supporting teachers through mentoring and coaching

September 2018
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.

3 Options:

1) Intervene at grade 4 in English
2) Intervene before grade 4 in English
3) Intervene before grade 4 in HL
Background (International Literature):

- 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
Experiment #1: 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
- Results?
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.
Experiment #2: Early Grade Reading Study

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

<table>
<thead>
<tr>
<th>Control group</th>
<th>“Training”</th>
<th>“Coaching”</th>
<th>“Parent Involvement”</th>
</tr>
</thead>
<tbody>
<tr>
<td>(80 schools)</td>
<td>Lesson plans, reading materials + central teacher training</td>
<td>Lesson plans, reading materials + on-site coaching</td>
<td>(50 schools)</td>
</tr>
<tr>
<td></td>
<td>(50 schools)</td>
<td>(50 schools)</td>
<td>(50 schools)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Training</th>
<th>Coaching</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total annual cost for 50 schools</td>
<td>$113,850</td>
<td>$160,000</td>
<td>$84 600</td>
</tr>
<tr>
<td>Per learner annual cost</td>
<td>$30.58</td>
<td>$42.91</td>
<td>$22.75</td>
</tr>
</tbody>
</table>

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

- Estimated effect size (SD)

- Intervention 1 - Training
- Intervention 2 - Coaching
- Intervention 3 - Parents
Main results:
Impact for those with 2 years of interventions

**Control**: 2 years of school

**Training**: About 19% of a year of learning

**Coaching**: About 40% of a year of learning

**Parents**: About 13% of a year of learning
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?
Experiment #3: EGRS 2

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

<table>
<thead>
<tr>
<th>Control group</th>
<th>“On-site coaching”</th>
<th>“Virtual coaching”</th>
</tr>
</thead>
<tbody>
<tr>
<td>(80 schools)</td>
<td>Paper-based lesson plans + On-site coaching</td>
<td>Tablet based lesson plans + Virtual coaching</td>
</tr>
<tr>
<td></td>
<td>Reading materials</td>
<td>Reading materials</td>
</tr>
<tr>
<td></td>
<td>On-site coaching</td>
<td>Virtual coaching</td>
</tr>
<tr>
<td></td>
<td>(50 schools)</td>
<td>(50 schools)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>On-site coaching</th>
<th>Virtual Coaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total annual cost for 50 schools</td>
<td>$182,920</td>
<td>$164,60</td>
</tr>
<tr>
<td>Per learner annual cost</td>
<td>$47.64</td>
<td>$42.88</td>
</tr>
</tbody>
</table>

2017: Grade 1
2018: Grade 2
2019: Grade 3
EGRS II: Preliminary learner outcomes (after 1 year)

Control  On-site coaching  Virtual coaching

- Close your eyes
- Stand up
- Put your hands in the air
- Turn around
- Sit down and put your hands on the table
EGRS II: Preliminary learner outcomes (after 1 year)

<table>
<thead>
<tr>
<th></th>
<th>Vocabulary</th>
<th>Listening Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cow</td>
<td>Pig</td>
</tr>
<tr>
<td></td>
<td>Where did they go?</td>
<td>Why did they take their shoes and socks off?</td>
</tr>
<tr>
<td>Control</td>
<td>[Graph]</td>
<td>[Graph]</td>
</tr>
<tr>
<td>Treatment 1</td>
<td>[Graph]</td>
<td>[Graph]</td>
</tr>
<tr>
<td>Treatment 2</td>
<td>[Graph]</td>
<td>[Graph]</td>
</tr>
</tbody>
</table>
EGRS II: Changed instructional practices

• Teachers and learners are now mainly using English in EFAL lesson
• 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
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?
Overview of Improvement Plan

1. Establish a **Steering Committee** to manage and facilitate the implementation of the EGRS Improvement Plan

2. Adopt a **structured learning programme** using daily lesson plans which incorporates key reading materials, as a way of implementing CAPS.

3. Develop guidelines for **on-site coaching** by specialised coaches, and institutional support.
   1. Develop guidelines for on-site specialised coaches
   2. Develop guidelines for institutional support of teachers and coaches.

4. Provinces should **ring-fence finances** for the implementation of the HL and EFAL curriculum programme

5. The DBE and Provincial Departments of Education should **adopt an effective programme**.

6. **Further research** needs to be conducted to further strengthen the programme
Plans for scaling up in NW 2019-2020

• Full scale coverage in the 2 districts we’ve been working in (Ngaka Modiri Molema & Dr Kenneth Kaunda)
• Covering both HL and EFAL simultaneously
• A new service provider
• Subject advisors to receive training
• All non-fee paying schools using Setswana as home language in Foundation Phase (nearly 300 schools) to receive:
  – Up front training
  – Lesson plans
  – Integrated reading materials
• 165 of these schools (including all of the original 80 control schools) to receive on-site coaching in addition
• A sub-set of 82 schools to receive an overlay of a school management training programme for Principals and HODs
• Assignment of schools still allows for analysis of causal impact of each component going forward
Thank you!

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