Three levels of analysis from large-scale research on interventions to improve literacy in South Africa

Lesson Observation Study: UKFIET, September 2017
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Purpose

Lesson Observation Study: How has this changed?

External Intervention

Teachers’ instructional practices

Improve learner achievement or outcomes

RCT: Rigorous Evidence

To determine the **specific mechanisms** through which the interventions work
Study Design: Sample

Control group
(80 schools)

“Training”
Lesson plans, reading materials
+ central teacher training
(50 schools)

“Coaching”
Lesson plans, reading materials
+ on-site coaching
(50 schools)

“Parent Involvement”
(50 schools)

- 6 urban schools
- 5 high-performing schools
- 5 low-performing schools
- 4 schools with high learning gains
## Study Design: Sample

<table>
<thead>
<tr>
<th>School Characteristics</th>
<th>In RCT</th>
<th>In LO Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>30.9%</td>
<td>36.7%</td>
</tr>
<tr>
<td>Quintile 1</td>
<td>48.7%</td>
<td>41.7%</td>
</tr>
<tr>
<td>Quintile 2</td>
<td>28.3%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Quintile 3</td>
<td>23.0%</td>
<td>33.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teacher Characteristics</th>
<th>Average teacher age</th>
<th>Average teacher experience</th>
<th>Average teacher FP experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48.320</td>
<td>17.086</td>
<td>14.446</td>
</tr>
<tr>
<td></td>
<td>46.519</td>
<td>16.880</td>
<td>14.137</td>
</tr>
</tbody>
</table>

**Good representation** of the schools in the study
Study Design: Instruments

- Instruments developed by Dr Cheryl Reeves

- Comprise of three instruments
  - Lesson Observation
  - Document Review
  - Teacher Interview

- Challenges in developing the instruments:
  - Teachers do not cover all of the topics and skills in one lesson
  - This is particularly the case in the intervention schools.
  - Trade-off with instrument length
Fieldworkers

• Concern: The quality of fieldworkers.

• Fieldworkers were recruited using the following minimum criteria:
  • At least a Bachelor’s degree in Foundation Phase teaching
  • Fluency in reading and writing in English
  • Valid driver’s license and regular driving experience

• Preference was given to individuals who:
  • Have completed or are busy completing their post-graduate studies in Foundation Phase teaching
  • Have research experience
  • Proficient in Setswana

• Six fieldworkers were recruited
Teaching and Learning Environment

- Reading Carpet
- Teacher can move around
- Reading Corner
- Timetable
- Setswana Books in Class
- Word Wall
- Books are made available

Control
Intervention 1
Intervention 2
Print-Richness in the classrooms

- Classroom has a reading corner
- Books are available in Setswana
- Words systematically on Word Wall
- Books seem to be available to learners
- Grade 2 timetable is on display
- Books are available in English
- Learners’ work are on display

Control | Intervention 1 | Intervention 2
## Print-Richness in the classrooms

<table>
<thead>
<tr>
<th>Item</th>
<th>C</th>
<th>T1</th>
<th>T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days of the week</td>
<td>9</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>Words matched to pictures</td>
<td>9</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>High frequency words</td>
<td>5</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Patterns for cursive writing</td>
<td>4</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Months</td>
<td>8</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Phonics charts</td>
<td>9</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Alphabet frieze</td>
<td>9</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Number word chart</td>
<td>9</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Birthday chart</td>
<td>6</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Weather chart</td>
<td>3</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Learners' names</td>
<td>3</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>News board</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Signs</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
No time was lost due to learners not being involved:

- 90% of intervention 2
- 75% of intervention 1
- 55% of the control
In the control schools, only **half** of the work plans observed included **specific lesson plans**.
Curriculum Coverage

Clear Differences: Tracking Implementation of Lesson Plans

- Rarely observed in Control schools
- Not often in Intervention 1 schools
- 75% of Intervention 2 schools

Confidence in covering the curriculum:

- All teachers were quite confident
- Workbooks only corroborated this in Intervention 1 schools

![Bar Chart]

- Control
- Intervention 1
- Intervention 2

- Will finish by the end of the year
- Workbooks prove curriculum coverage
Opportunities to handle books

The EGRS interventions have been successful not only in providing classrooms with the necessary readers, but specifically in teaching and motivating teachers to make use of these resources to promote reading among their learners.
Literacy and Language Development

• At the heart of Home Language Curriculum
• One specific activity used for this is Shared Reading
• Across all schools teachers were observed:
  • Demonstrating care for books
  • Read with intonation
  • Encouraging learners to read
  • Promoting word recognition

• In Intervention 2 schools specifically:
  • Use LTSM to develop concepts about print
  • Encourage learners to answer open ended questions
  • Vocabulary Development

• BUT Overall: Teaching practices around reading of extended texts was weak
Opportunities to write

- Learners did 2 or more different tasks
- All learners complete written tasks
- Learners never copy from one another
- Learners do any kind of cursive writing
- Teacher takes corrective measures
- Teacher check pencils are held correctly

Control  |  Intervention 1  |  Intervention 2

Graph shows quantities for each category across different interventions and control groups.
Opportunities to write

Average Number of Pages of Written Work

In the DBE Workbooks

In Exercise books

C  T1  T2
Opportunities to write

EGRS lesson plans demands **much more writing** from learners than what the teachers have been used to.
Opportunities to read

- Prevalence of individual guided reading was **very low** across all three groups of schools

- Across all classrooms, learners were seldom given opportunities to read individually

- It seems that the main reading activity in classrooms, regardless of the sampled group, was that of **learners reading aloud together**

- **Group guided reading:**
  - Was **more likely** to be observed in **intervention** classrooms
  - But, teachers are particularly struggling with differentiating between different ability groups
Teacher reported that **someone observed** her HL lesson in 2016:
- 50% Control teachers
- 50% Intervention 1 teachers
- 90% Intervention 2 teachers

**Feedback** they received after lesson observed was **useful**:
- < 50% of Control and Intervention 1 teachers
- 85% of Intervention 2 teachers
Theme differences

Teaching and Learning Environment
Classroom Management
Planning and Curriculum Coverage
Language and Literacy Development
Learning and Teaching Support Material
Opportunities to write
Opportunities to read

Control  Intervention 1  Intervention 2
Main Success Factors

• **Improved Classroom management:**
  – Less teaching time lost
  – Less learners uninvolved
  – Opportunities for group-guided reading
  – More writing exercises covered

• **Specificity of lesson plans**
  – Beneficial in translating the CAPS curriculum into daily lessons
  – For example spelling and vocabulary development
    • Increased prevalence during lessons
    • Personal Dictionaries
Main Success Factors

• Reading coaches played a critical role:
  – In providing teachers with a more in-depth understanding of the enactment of the methodologies – shifting deep practice
    • As signalled through the Group-guided reading
  – In supporting and motivating teachers in persisting with the implementation of the programme
    • Specifically in helping the teachers to do more of the practices in which they are already familiar
      – High frequency words
      – Writing exercises

• Much more writing
Thank you