

Improving reading and literacy in the early school years:

The value of onsite teacher coaching

Most South Africans see basic education in the South African school system as a crucial foundation of their children's journey toward rapid life improvement - a life of employment and personal wellness. However, many children still don't acquire adequate literacy to reach this goal. *Dr Cas Prinsloo and Nompumelelo Mohohlwane* write about this challenge and the value of teacher coaching in schools in North West.

The factors that influence the success of any education system are multiple and complex, evident when one simply tries to list the key role players and stakeholders. They include, among others, learners, parents, teachers, teacher trainers, academics, researchers, and government officials. The latter, within the Department of Basic Education, include subject advisors, school principals, district and circuit managers, and all other national and provincial education managers.

A crucial chain of events

Education economists repeatedly point to pivotal factors that enable or hinder acceptable school achievement. Although potentially an oversimplification, the subsequent chain of events may be helpful. Learners should start school at the appropriate age, free of malnutrition, stunted growth, parasitic infections and other learning obstacles.

They should have the support of language-rich homes and communities. Within six months in Grade 1 they should master decoding at the letter-sound level. By the end of Grade 3, word and sentence reading should be fluent and with comprehension. Over the next five years, they should hone their foundational language proficiencies into academic and conceptual proficiency. Everyone who will have to switch to an official language of learning and teaching that differs from the initial home language should first be made proficient in both these languages.

Tackling poor performance

Regular systemic and comparative assessments, including the Progress in International Reading Literacy Study, show that almost 60% of South African learners are unable to read properly by Grade 4. This is important, because literacy and language underachievement in the early grades explains why so many learners leave school by Grade 9.

In trying to find and implement a strong solution, the Department of Basic Education (DBE) convened funders, implementation service providers, academics and an evaluation partner onto a single collaboration platform.

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They focused on Setswana reading proficiency among early-grade learners. Teachers were trained to deliver two sets of interventions aligned fully with the national curriculum. They were implemented along with a parent-support intervention, over the course of two years. These teachers and learners were from Grade 1 in 2015, and Grade 2 in 2016; a cohort, therefore. To attribute any observed achievement changes to an intervention, a robust randomised control trial design was selected. It was complemented by qualitative data from two classroom-based

observation studies. The three interventions were each delivered in 50 schools, randomly selected from two districts from the North-West Province, and entailed:

- A structured learning programme using scripted lesson plans, graded readers, and related teaching materials, presented to teachers through centralised training workshops over two days at the start of each semester.
- The same structured learning programme contents and materials as above, presented to teachers through specialist on-site coaching and small cluster training workshops.
- Weekly meetings between parents and recruited community reading facilitators to discuss the importance of learning to read in the foundation phase and help parents with techniques for assisting their children.

Evaluating impact

For the impact evaluation, the HSRC developed individual oral learner assessment instruments in Setswana with the aid of linguistic specialists and officials from the DBE. Contextual questionnaires were also designed. These were administered in three waves: at the beginning and end of Grade 1, and the end of Grade 2. Data collection involved the three sets of 50 intervention schools, and 80 control schools. At the outset, 20 learners were randomly selected and assessed in each school. The assessment instruments covered vocabulary, decoding fluency at letter,

word and sentence level, phonological awareness, comprehension, and some proficiencies across other subjects (English and Numeracy). Some existing Early Grade Reading Assessment subtests were included in the process.

The teacher pedagogy intervention through coaching proved most successful (Figure 1). The effect size of 0,33 of a standard deviation was found equivalent to 40% of a year's learning by the end of Grade 2. Should such a change continue, learners would be a full year ahead of their peers during Grade 5. Even more telling, the gap could be two years just after completing Grade 9.

Following up

The initial two-year Setswana study was extended to Grade 3 in 2017. Another evaluation wave will follow early in 2018, as well as follow-up tracking after more years to evaluate the sustainability of impact. The parent intervention was discontinued after two years of implementation.

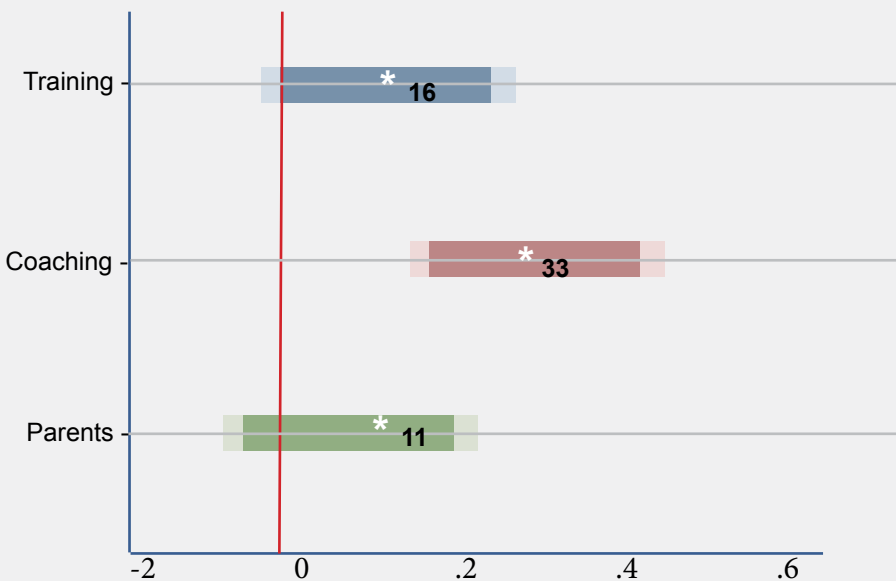
Cost-effectiveness calculations revealed that the coaching model carried the best cost-benefit ratio. It achieved more than double the impact of conventional training using less than double the cost. Although the parent intervention is much cheaper, the size of the impact does not warrant pursuing such small gains, without statistical certainty, and, in addition, in the face of too many challenges related to parental involvement.

Furthermore, a similar second study was started in 2017 in Mpumalanga to assess intervention impact for English First Additional Language and siSwati (an Nguni-group language). Scoping a Mathematics intervention has also commenced.

Conclusions

A number of conclusions and recommendations arose from the study. A pedagogy-based, structured programme with teachers, and materials, within the existing curriculum, proved to be strongest, and most cost-effective. The delivery mode of frequent coaching outperformed that of periodic direct central training.

Figure 1: Estimated intervention impact* (excluding repeaters)



* With 90% and 95% confidence intervals.

(Source: DBE. (2017). Summary Report - Results of Year 2 impact evaluation: Early Grade Reading Study (EGRS). Pretoria: Department of Basic Education (also see DBE website).

The implications of this argument also argue against cascading versions of central training, most likely to have less impact. Observations related to the identity and role of coaches argue against considering existing subject advisors for this task. There are too few subject advisors in the system, and the current structures focus on accountability, not on support and professional development. Because the intervention and evaluation study were implemented in 230 schools, and involved coverage of almost all the schools in two provincial districts, upscaling is feasible, as long as around 100 to 500 schools per province are prioritised at a time, according to need.

Such intervention work should also straddle the full foundation phase to ensure optimal retention and transfer of reading and literacy teaching skills. Costs are estimated at approximately R6 million per 100 schools.

The study strongly emphasised the gap caused by the non-existence of reading norms in African languages. Such norms have to be developed authentically and reported as a matter of urgency. Although cost requirements for parent-based models

may be favourable, and potentially cost-effective, it will only make sense once the conundrum of sustainably involving parents has been solved.

Similarly, further attention and solutions relevant to remote rural settings are required. Tracking these initial cohorts further into their school lives is important for evaluating the long-term benefits and other sustainability issues related to the intervention.

References

More details about the study can be found here. <https://www.education.gov.za>

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