

The Importance of Management Support for Teacher-Led Targeted Instruction in Ghana

This brief presents findings from the baseline survey conducted between May and June 2018 for the Strengthening Teacher Accountability to Reach All Students (STARS) project, a randomized evaluation measuring 1) whether teacher led targeted instruction increases student achievement in upper primary grades and 2) how additional managerial support from head teachers and circuit supervisors can increase the likelihood that teachers implement targeted instruction in their classrooms. The data are drawn from 210 schools, 140 circuit supervisors, 209 head teachers, 671 P4 through P6 teachers, and 5,894 P4 and P5 pupils from 20 districts and seven regions in Ghana. Preliminary results from the evaluation are expected in October 2019.

Researchers: Sabrin Beg, Anne Fitzpatrick, Adrienne M. Lucas

Partners: Ghana Education Service, The National Council for Curriculum and Assessment, The National Teaching Council, The National Inspectorate Board, UNICEF

Country: Ghana

Timeline: 2018-2019

Sample: 210 government primary schools

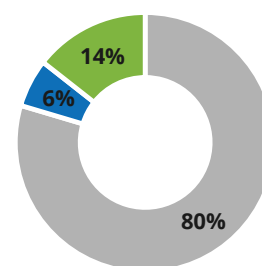
Key Insights

1. School-level statistics across the sampled schools showed an average pupil-teacher ratio of 30:1, that is, 30 pupils for every teacher. The largest pupil-teacher ratio was 102 pupils per teacher while the smallest pupil-teacher ratio was five students per teacher. Large class sizes in some schools could have negative implications for classroom management, quality of instruction, and the overall performance of pupils.

2. Pupils in primary 4 and 5 generally scored poorly in the baseline language and mathematics assessment, especially in oral reading fluency and comprehension as well as performing simple division operations.

- **A sizeable proportion of the pupils in primary 4 and primary 5 struggled with recognizing four-letter words compared to three-letter words.** Sixty-nine percent of pupils correctly identified all five three-letter words, while only 16 percent could correctly identify all seven four-letter words. On average pupils could recognize 82 percent of the three-letter words and only 55 percent on the four-letter words.
- **Pupils had difficulty with oral reading fluency, which also influenced their reading comprehension ability.** Eighty-four percent of pupils could not read a five-sentence passage or story fluently aloud within 45 seconds and without making more than two mistakes.

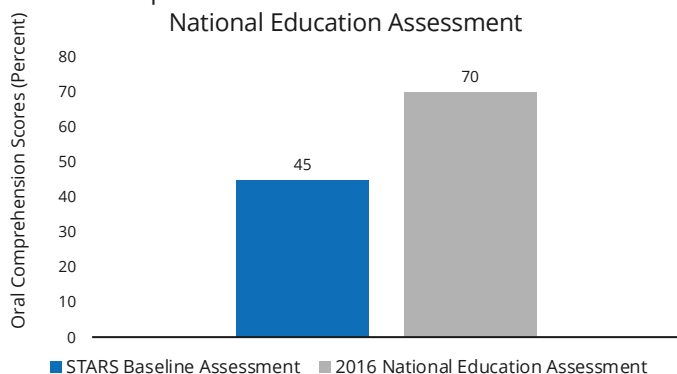
Pupils' Ability to Answer Reading Comprehension Questions



- Answered no questions
- Correctly answered one question
- Correctly answered two questions

Almost 80 percent of pupils could not correctly answer any of the post-reading comprehension questions because they were either unable to read the passage or did not understand it. Reading fluency is closely related to reading comprehension. Of those who could not read the passage aloud, 94 percent could also not answer either question about the passage. These results demonstrate that pupils' have low reading fluency skills that limits their ability to comprehend written passages.

Oral comprehension scores are generally lower for students assessed in the STARS baseline compared to students assessed in the 2016 National Education Assessment



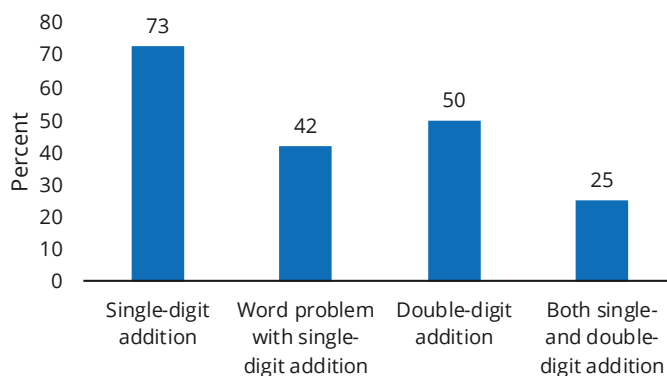
- **Approximately half of pupils can answer direct questions from text, but most cannot make inferences across sentences.**

- » On average, pupils scored 45 percent correct on all of the oral comprehension questions, which is lower than the average percentage correct score of 70 percent that P4 pupils scored in the 2016 National Education Assessment. Students in particular struggled with comprehension questions requiring them to make inferences from sentences. Students could answer 63 percent of oral questions requiring direct information from sentences, but scored only 15 percent on questions requiring them to make inferences.
- » After cross-tabulating pupils' listening and reading comprehension scores, 77 percent of those who scored at least one point in the listening comprehension test were unable to score at least one point in the reading comprehension test. These findings demonstrate that reading comprehension is harder for the tested pupils than listening comprehension.

- **Pupils do not have difficulties in identifying two-digit numbers.** Results indicated that about 96 percent of pupils could identify all of the two-digit numbers presented.
- **Basic addition, subtraction, and division problems were challenging for pupils.** Seventy-three percent of pupils could solve both of the single-digit addition problems. However, only 42 percent of pupils could answer a word problem that involved single-digit addition. Similarly, only 50 percent could correctly solve the double-digit addition problems. Only 25 percent could solve all of the single- and double-digit addition problems. This is comparable to the 2015 Ghana Early Grade Mathematics Assessment, where P2 pupils obtained between 56 and 84 percent correct on the addition of single-digit numbers with sums less than or equal to 10, and 33 to 40 percent correct on the addition of single-digit numbers with sums greater than 10. When tasked with subtraction, 39 percent of pupils could not solve any subtraction problems, and only ten

percent of pupils could solve a double-digit subtraction problem. This is also comparable to the 2015 Ghana Early Grade Mathematics Assessment, where P2 pupils' performance in single-digit subtraction ranged from 33 percent to 67 percent correct. Finally, 88 percent of pupils could not solve either of the simple division problems.

Pupils' Ability to Solve Addition Problems



Conclusion

The data from the baseline assessment of pupils' language and mathematics competency skills highlight that pupils are struggling to grasp core concepts, especially in oral reading fluency and comprehension as well as performing simple division operations. These challenges have implications for pupils' success at higher levels of language and mathematics education, and could later affect their performance at higher levels of their education.

These findings lend credence to the importance of the STARS study. Notably, implementing the targeted instruction curriculum could potentially address these low baseline test scores: teaching pupils lessons that match their learning level may result in more effective teaching.

The forthcoming results from the evaluation will help Ghana's Ministry of Education assess whether teacher-led targeted instruction can be replicated at scale within the existing education system. The evaluation will also shed light on how supervision can be strengthened to provide coaching and monitoring support for teachers to implement new pedagogical approaches.

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