



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Funda Uphumelele National Survey:

TECHNICAL REPORT

Pretoria, November 2025



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Abbreviations and Acronyms

Acronym	Meaning
ANA	Annual National Assessments
DBE	Department of Basic Education
EFAL	English First Additional Language
EGRA	Early Grade Reading Assessment
EGRS	Early Grade Reading Study
ELNA	Early Learning National Assessment
EMIS	Education Management Information System
FUNS	Funda Uphumelele National Survey
FURS	Funda Uphumelele Research Study
GPM	Grapheme-to-phoneme mappings
HL	Home Language
ICT	Information and Communication Technology
IRT	Item Response Theory
LCPM	Letter Sounds Correct Per Minute
LOLT	Language of Learning and Teaching
LSK	Letter Sound Knowledge
M&E	Monitoring and Evaluation
NECT	National Education Collaboration Trust
NSC	National Senior Certificate
ORF	Oral Reading Fluency
PIRLS	Progress in International Reading Literacy Study
RON	Rapid Object Naming
SASE	South African Systemic Evaluation
SEACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SDG	Sustainable Development Goal
TIMSS	Trends in International Mathematics and Science Study
TRIAL	Teaching Reading in African Languages
WCPM	Words Correct Per Minute

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Executive Summary

Background

Over the past seven years, the Department of Basic Education (DBE) has led the development of reading benchmarks in all 11 official spoken languages. These benchmarks specify the foundational reading skills that children need to acquire by the ends of grades 1, 2 and 3 in order to be on track to read with comprehension by grade 4. Teams of officials, linguists and data analysts worked together to develop benchmarks specific to each language, taking into account considering the different language features. These benchmarks are shown in the table below.

Table A.1: The benchmarks for each language and grade

DBE Early Grade Reading Fluency Benchmarks			
Reading Fluency outcomes expected by the end of each grade's academic year			
Home Language	Grade 1	Grade 2	Grade 3
	Letter Sound Knowledge (LSK)	Oral Reading Fluency (ORF)	Oral Reading Fluency (ORF)
Afrikaans	40 CLSPM	45 CWPM	60 CWPM
English	40 CLSPM	50 CWPM	70 CWPM
Tshivenda	40 CLSPM	35 CWPM	55 CWPM
Xitsonga	40 CLSPM	35 CWPM	55 CWPM
IsiNdebele	40 CLSPM	20 CWPM	35 CWPM
IsiZulu	40 CLSPM	20 CWPM	35 CWPM
IsiXhosa	40 CLSPM	20 CWPM	35 CWPM
Siswati	40 CLSPM	20 CWPM	35 CWPM
Sepedi	40 CLSPM	40 CWPM	60 CWPM
Sesotho	40 CLSPM	40 CWPM	60 CWPM
Setswana	40 CLSPM	40 CWPM	60 CWPM
English First Additional Language	N/A	30 CWPM	50 CWPM

The DBE plans to use these benchmarks to mobilise change at three levels of the system:

National and Provincial Administration	Mid-tier support (Districts and School Management)	Classrooms
Defines reading proficiency (benchmarks)	Use standardised tools to assess reading across schools	Standard against which to measure reading skills
Communicates benchmarks and targets	Identify schools and classrooms needing support	Identify early on learners at risk of not learning to read
Monitor progress	Provide targeted support to schools and teachers	Adapt instruction to learner needs

Now, for the first time, the Funda Uphumelele National Survey (FUNS) measures the percentages of children reaching these critical reading benchmarks by the end of grade 1, 2 and 3. FUNS assessed 27 838 learners across 710 schools and is representative nationally, provincially and of every language.

This is the primary aspect of this work however there are three aspects in total, namely:

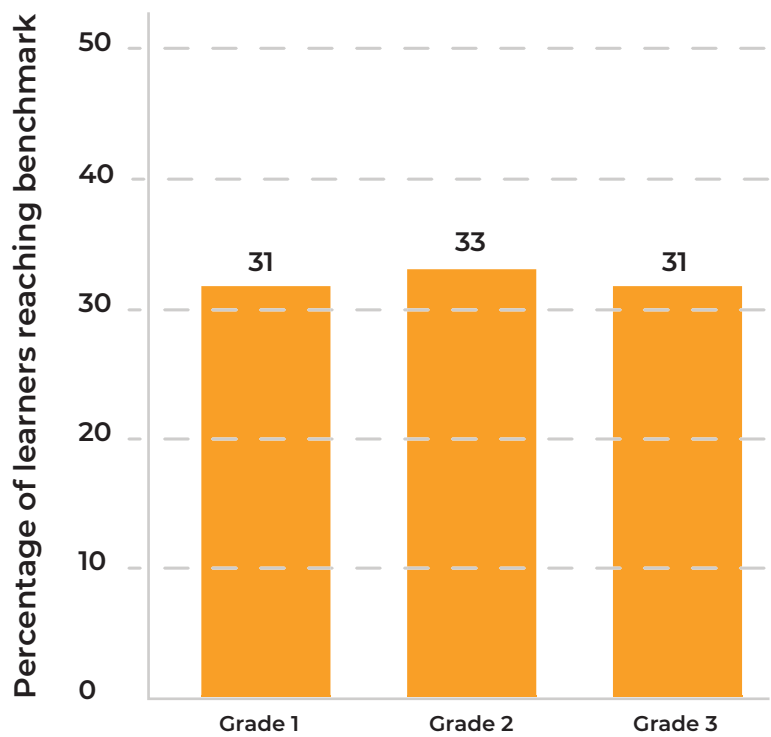
- A national survey to measure reading against Foundation Phase national benchmarks in Grade 1-4 in all 11 official spoken languages (FUNS)
- The development of a new battery of benchmark-aligned assessments (FURS)
- Research on the Teaching of Reading in African Languages (TRIAL)

Results

- In Grade 1, only 31% of learners achieved the Home Language Reading Benchmark, defined as 40 correct letter sounds per minute across all languages. In Grades 2 and 3, just over 30% of learners met their respective Home Language Reading Benchmarks, which vary by language group and are based on oral reading fluency measured in words correct per minute.
- By the end of grade 3, there are still 15% of learners who cannot read a single word.
- There are significant inequalities in the likelihood of reaching benchmarks by language, province, gender and socio-economic status.
- Learners assessed in English were most likely to reach benchmarks, as were learners in the Western Cape and Gauteng compared to other provinces. However, these advantages are largely attributable to the higher average socio-economic status of these groups.
- Children in quintile 5 schools are roughly twice as likely to reach reading benchmarks than children in no-fee schools (quintile 1-3).
- Gender gaps are also exceptionally large in favour of girls – in some languages girls are twice as likely to reach the benchmarks than boys. These inequalities in early learning are certainly contributing to the disparities we see later on in the system, where boys are more likely to drop out of school without completing secondary education.



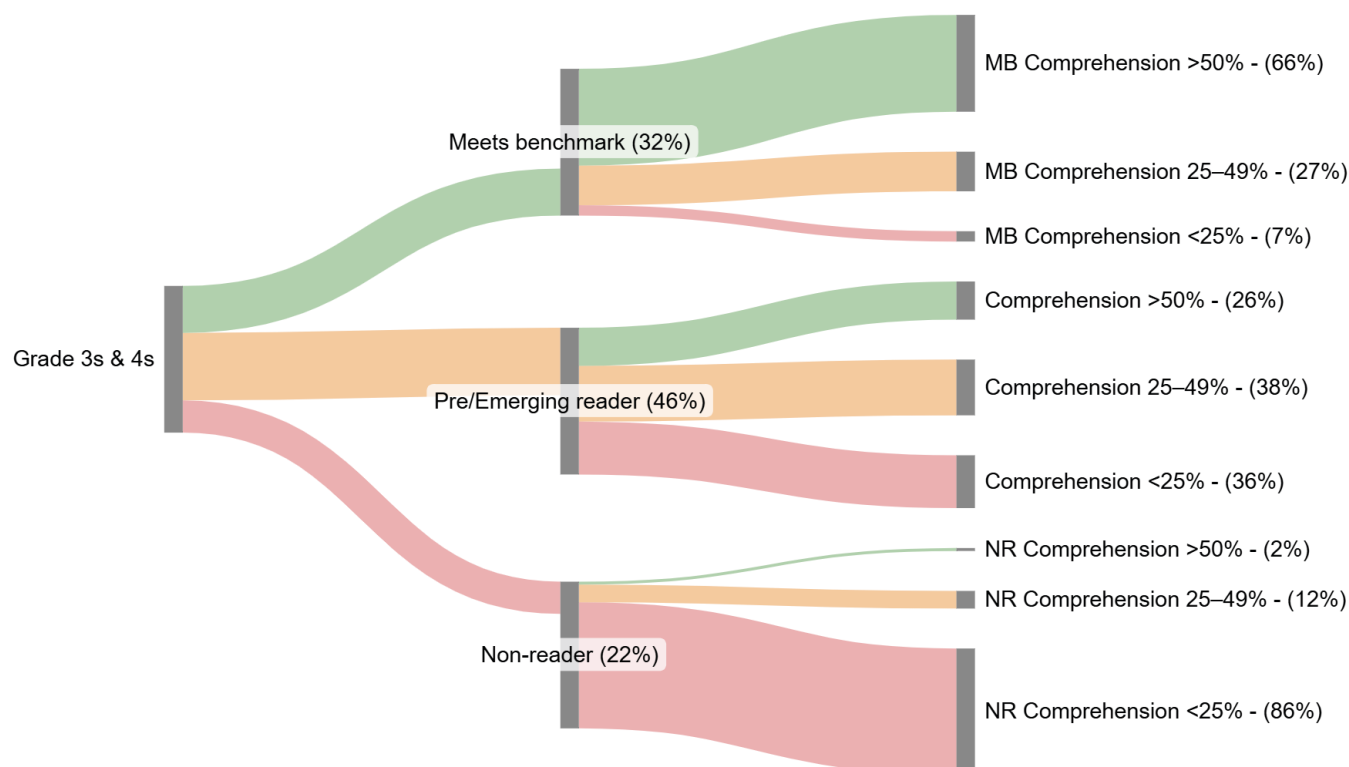
Figure A1: Percentage of learners reaching Home Language Benchmarks



The FUNS data reveals a strong relationship between mastering foundational reading skills and the all-important outcome of reading comprehension. The Sankey diagram below shows the percentages of all Grade 3 and 4 learners who meet the fluency benchmark, who are in a pre- or emerging reader phase, or who are non-readers. Each of these three categories is then split into another three categories based on their performance in written comprehension. For learners who met the benchmark in oral reading fluency, 66% also scored above 50% in written comprehension, while only 7% scored below 25%. The opposite pattern is evident for non-readers at the bottom of the diagram: 86% of non-readers scored below 25% in comprehension, and only 2% managed to achieve more than 50%. This diagram visually confirms the importance of meeting oral reading fluency benchmarks in order to go on to read with comprehension.



Figure A2: Relationship between ORF category and written comprehension



Oral language skills, such as vocabulary and morphological awareness, also matter for reading comprehension. Most learners bring relatively strong vocabulary and morphological awareness in their home language. This is why the child's home language is an important resource when learning the foundational skills of reading and writing.

The Funda Uphumelele project is an example of collaboration and investment in our indigenous African languages, which have historically been neglected. The assessment instruments were developed by 25 linguists from 11 universities working across all 11 languages. The Zenex Foundation, FEM Foundation, UNICEF, the Bill & Melinda Gates Foundation, Old Mutual Foundation, Optima Foundation, the World Bank, and the Michael & Susan Dell Foundation all invested significantly in our local languages and in foundational learning.

Implications for the sector

These results collectively suggest that the learning challenges typically identified in the intermediate phase (e.g. PIRLS and the South African Systemic Evaluation) emerge earlier. This highlights the need to scale up evidence-based interventions to support learners in acquiring home language reading skills in Grades 1 to 3.

The first round of FUNS is a baseline, with the intention to administer subsequent rounds in 2029 and beyond. This will allow us to track progress in the foundational skills that will lead to improvements in assessments of comprehension later on.

Minister's Foreword

Learning to read is a crucial gateway for children to succeed in later parts of the curriculum. It is essential that children learn to read in the language they best understand, which is their home language. Unfortunately, evidence from both local and international assessments, such as the South African Systemic Evaluation (SASE) and the Progress in International Reading Literacy Study (PIRLS), shows that most South African children reach the end of the Foundation Phase without having learned to read with adequate comprehension in any language.

Reading with comprehension – or reading with meaning – is a critical outcome that must be achieved by the end of the Foundation Phase. However, reading with comprehension is like the tip of an iceberg: it is what we see in assessments such as PIRLS and the Systemic Evaluation, but beneath the surface lies a whole range of foundational reading skills that must be developed and work together to enable comprehension.

To better understand how these foundational skills develop, the Department of Basic Education (DBE) has led a process to develop reading benchmarks in all 11 official spoken languages. These benchmarks indicate the level of fluency in letter sound recognition that should be achieved by the end of Grade 1, and the level of oral reading fluency that should be achieved by the end of Grades 2 and 3 in each home language, for children to be on track to read with comprehension by Grade 4.

Given the distinct linguistic and orthographic characteristics of South Africa's language families, these benchmarks were developed separately for each group of languages. For the first time, the Funda Uphumelele National Survey (FUNS) now provides a baseline measure of the percentages of children, in all languages, who are reaching these critical benchmarks at the end of Grades 1, 2, and 3.

The results confirm that we face significant challenges in the teaching and learning of reading in the early grades, but FUNS gives us a much deeper understanding of the development of the specific skills that underpin reading comprehension.

In the DBE, we do not shy away from acknowledging and deeply understanding the challenges we have with low and unequal learning outcomes. It is only through honest reflection on these core skills, which are the foundation of learning, that we can move the system forward and provide better access to high-quality education for all children.

We do not measure simply for the sake of measuring. The reading benchmarks, and the Funda Uphumelele work, are designed to inform the reforms that we have been undertaking. What we measure is what we can improve. We have implemented a strategic reorientation of the basic education system towards strengthening the foundations of learning.

1. At the system level: We will use these results to monitor progress nationally, provincially, and in each language.
2. At the district and school support level: By distributing newly developed, language-appropriate reading assessments to subject advisers and schools, this work will strengthen accountability and improve support from district offices and school management teams.
3. At the classroom level: Teachers will use the benchmarks and accompanying tools to conduct diagnostic assessments with their learners and to inform targeted remediation. And in this way raise their awareness of what reading success looks like and how it develops in Foundation Phase.

I am deeply proud of the work that the DBE has led in this regard, including, in particular, the collaboration with diverse teams of linguists and language experts working across all 11 official spoken languages. I hope that this project focuses our collective attention on the critical learning outcomes to be achieved in the early grades; that it inspires change throughout the education system; and that it raises the status of our local languages by showing that we value and prioritise children's ability to master reading and literacy skills in their own languages.

Finally, I look forward to the next round of FUNS in the coming years and I am hopeful that we will see a significantly larger share of children reaching the reading benchmarks – progress that can, in turn, translate into improved results in measures of reading comprehension, such as PIRLS, and ultimately into more learners successfully reaching and passing the National Senior Certificate and participating and excelling in gateway subjects.

Ms Siviwe Gwarube
Minister of Basic Education
7 November 2025

Signed:

Director General's Foreword

It is with great pleasure that I introduce the inaugural Funda Uphumelele national survey, a landmark study that marks a significant milestone in our quest to improve foundational literacy in South Africa. This comprehensive research is the culmination of years of dedicated effort to enhance our understanding, measurement, and support for reading in African languages during the early grades.

The benchmark aligned baseline established through this survey provide a nuanced understanding of learning outcomes, enabling teachers to identify and address gaps in literacy skills from as early as Grade 1. Our goal is to ensure that every child can read for meaning by the age of 10, aligning with our sector plans and the President's declarations in the State of the Nation Address.

I extend my heartfelt congratulations to the researchers, contributors, and stakeholders who have collaborated to make this initiative a reality. This achievement is a testament to the power of partnership and expertise, bringing together experts in African languages, data analysts, and funders from multiple universities and institutions.

The Funda Uphumelele survey will serve as a foundation for tracking progress, informing provincial responses, and guiding targeted interventions. I am confident that this study will play a pivotal role in shaping our efforts to improve reading outcomes and fostering a culture of literacy in South Africa.

I trust that this report will inspire a collective commitment to action, as we work together to ensure that every child in South Africa can read and thrive.

Mr H.M.Mweli

Director-General, Department of Basic Education
7 November 2025

Signed:



Acknowledgements

The DBE would like to thank all those who made this work possible.

To the 25 linguists who represented all 11 South African languages and who brought their expertise and care to originating, versioning, translating, and refining the assessments – thank you.

To the teams from the University of Pretoria, Tshwane University of Technology, University of Venda, Rhodes University, Nelson Mandela Institute, University of the Free State, University of Mpumalanga, University of South Africa, Stellenbosch University, University of the Western Cape, Varsity College, and the University of KwaZulu-Natal – your collaboration has been extraordinary.

To our funding partners – the Zenex Foundation, FEM Foundation, UNICEF, the Bill & Melinda Gates Foundation, Old Mutual Foundation, Optima Foundation, the World Bank, and the Michael & Susan Dell Foundation – thank you for believing in this work and for investing in the foundational skills that will transform lives.

Well done to the officials of the Department of Basic Education who led and coordinated this complex process, demonstrating what is possible when technical excellence and public service commitment come together. The support from the Minister, Deputy Minister, Director-General and branch heads involved in this project showed leadership and courage go ahead with this work even though the findings could be revealing of significant challenges.



PART ONE: CONTEXT OF READING IN SOUTH AFRICA

The high number of South African learners (81%) who cannot reach the lowest Progress in Reading Literacy Study (PIRLS) benchmark (i.e. understanding literal information in texts) suggests foundational problems. These include aspects of reading such as decoding texts - the technical aspects of reading that relate to knowledge of the written code. The research is now clear that before children can read with meaning and enjoyment, they must learn the skills of reading.

Failing to learn to read in the first three grades has dire consequences for the rest of a learner's schooling career since in Grade 4 learners transition from learning how to read to reading to learn other subjects including mathematics. Learners who do not make this transition swiftly are at risk of performing poorly in later grades and even dropping out of school altogether. It is important that these deficiencies in the early skills be addressed as soon as they are discovered. If this does not happen, learners will not be able to read fluently, let alone understand what they are reading.

In response, over the past decade, South Africa has set literacy as a priority in the nation's goals. The table below summarises the key national and international targets and indicators for early literacy in the first six years of formal schooling. Strategic efforts over the past few years in literacy culminated in South African National Literacy Strategy and Plan 2024-2030, published in August 2023. The strategy consolidates efforts and plans focusing on 1) policy and strategy, 2) pedagogical and curriculum implementation, 3) teacher training and 4) assessment, monitoring and research. This report focuses on the monitoring and research aspect.



Table 1.1: South African National Targets, Indicators, and Commitments for Early Literacy

National Outcomes

National Development Plan (NDP) Vision 2030 (adopted 2012)	
Goal: Learners home language should be used as a medium of instruction for longer and English is introduced much earlier in the Foundation phase.	Target: 90% of learners in grades 3, 6 and 9 must achieve 50% or more in the Annual National Assessment in literacy, numeracy/ mathematics and science
Objective: Improve the school system, including increasing the number of students achieving above 50% in literacy and mathematics	Target: 2022 Target 600 in SACMEQ
Action Plan to 2024 Towards the Realisation of Schooling 2030	
Goal 1 Target: Increase the percentage of learners in Grade 3 who, by the end of the year, have mastered the minimum language and numeracy competencies for Grade 3 in the Annual National Assessments to 95%.	
Goal 2 Target: Increase the percentage of learners in Grade 6 who, by the end of the year, have mastered the minimum language and mathematics competencies for Grade 6 in the Annual National Assessments to 95%.	
Goal 7 Target: Improve Grade 6 Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) Assessment average score in languages to 640 by 2030 (2007: 495 2013:538).	
Medium Term Strategic Framework (MTSF) 2014-2019	
Impact Target 2019: 75% of learners in Grade 3 achieving at the required level in the Annual National Assessments (ANA) in literacy and numeracy (2013 Baseline: 40% Literacy 50% Numeracy)	Impact Target 2019: 75% of Grade 6 learners achieving at the required level in the ANAs in Home Language (2013 Baseline: 68%) First Additional Language (41%), and Mathematics (27%)
Impact Target 2019: 550 average score obtained by Grade 6 learners in language in the Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) assessment (2007 Baseline: 495)	
Medium Term Strategic Framework (MTSF) 2019-2024	
Outcome: 10-year-old learners enrolled in publicly funded schools read for meaning	Target: All provinces implementing National Reading Plan
Target: All languages have Grade 1-3 home language literacy lesson plans.	Target: 100% of Grade 3 learners who learn through indigenous languages have graded reading books
Indicator: Grade 3 performance in the new Systemic Evaluation: Reading (targets to be determined after first assessment)	Indicator: Grade 6 performance in the new Systemic Evaluation: Maths: Literacy: (targets to be determined after first assessment)
Target: Improve Grade 6 average score for literacy in SACMEQ to 600 by 2020	Target: Improve average score in PIRLS from to 355 by 2021
Target: 100% of schools have received the Early Grade Reading Assessment tools	Target: 100% of foundation phase teachers trained in teaching reading & numeracy
Medium Term Development Plan (MTDP) 2024-2029	
Outcome: Improved education outcomes and skills	
Target: 40% of Grade 3 learners Reading above 'evolving level' as assessed through the South African Systemic Evaluation by 2029/30 (baseline 20%)	
African Union Goals & Priority Areas of Agenda 2063	African Union Strategic Objectives (SO) Continental Educational Strategy for Africa 2016-2025
Goal 2: Well-Educated Citizens and Skills Revolution underpinned by Science, Technology and Innovation	SO6: Launch comprehensive and effective literacy programmes across the continent to eradicate the scourge of illiteracy
Target: 100% literacy rate by 2025	
Sustainable Development Goals (SDG) Targets 2030	
Target 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	
Indicator 4.1.1: Proportion of children and young people by 2030 (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	Indicator 4.1.6: Administration of a nationally representative learning assessment (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education
Target 4.5: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.	Indicator 4.5.2: Percentage of students in a) early grades, b) at the end of primary, and c) at the end of lower secondary education who have their first or home language as language of instruction.

International Commitments

Source: Sebaeng, L and Mohohlwane, N. 2025. Benchmarking for Precursor Skills in Reading: SDG 4.1.1a. South Africa Case Study. UNESCO Institute for Statistics

The assessment landscape in South Africa

South Africa participates in selected national, regional and international assessments. Table 1.2 below documents the range of assessments, their purpose, their strengths and limitation. It also captures the grade and language of the assessment, the intervals of administration, and comparability over time amongst others. These are the PIRLS, the Early Grade Reading Assessment (EGRA), the South African Systemic Evaluations (SASE), Assessment for Learning, Southern & East African Consortium for Education Quality (SEACMEQ), Early Learning National Assessment (ELNA), Thrive by Five and the Funda Uphumelele National Survey (FUNS).

PIRLS, along with other regional studies that monitor reading like SEACMEQ, assess the highest order of reading: written reading comprehension. While reading for meaning is the goal of reading, learning to read is a complex and hierarchical process. A range of foundational reading subskills need to be mastered before one can comprehend what is in a text. Relying solely on these studies leaves a gap in the foundational skills learners have mastered and those needing further support.

South Africa has introduced new national assessments in the Foundation Phase, ELNA and the SASE. ELNA, however, measures the start of schooling and the SASE measures reading comprehension for Grade 3, Grade 6 and 9. This means that a gap remains in measuring outcomes in the earlier grades, particularly decoding skills that require individualized oral assessment, as well as oral language skills that serve as building blocks for written comprehension. Table 1.2 below catalogues the early assessments administered in South Africa along with their purpose, representivity, strengths and weaknesses, as well as frequency and ease of communication their outcomes.



Table 1.2: South African Catalogue of Early Literacy Assessments

Literacy Assessment	Purpose	Strengths	Limitations	Grade & Language	Intervals by years	Comparability over time	Nationally Representative	Provincially representative	Classroom use	Ease of communicating the results
PIRLS: Progress in Reading Literacy Study	Written reading comprehension	- Measures the ultimate skill of comprehension - Nationally representative - Lang representative - International - Secure Assessment	- Only measures reading comprehension - Floor effects – most children do not reach the lower threshold - At the end of Grade 4 – late for Foundation Phase remediation	Grade 4 11 Languages	Every 5 years	✓	✓			Point scale is difficult to communicate
EGRA: Early Grade Reading Assessment	Diagnostic test on early skills	- Focuses on early skills - Known by teachers and subject advisors - Used for national reading monitoring	- Use and purpose not fully aligned – classroom vs provincially and national - Not nationally comparable: Diagnostic teacher info – limited access and reliability - Test not secure - Not enough tests	Grades 1-3 11 Languages	3 times a year				✓	Scores need updating. Termly progress needs interpretation. Overall scores need interpretation.
Systemic Evaluations	Written comprehension at exit grades	- National comparison - Scaled with anchor items - Scale linked to SDG & CAPS	Only measures comprehension	Grades 3, 6 and 9 11 Languages	Every 3 years	✓	✓	✓		Currently baseline only reported by score/PIRLS scale
Assessment for Learning	Formative feedback	- Ongoing assessment - CAPS aligned - Accessible to all teachers	Assumes teachers have remedial skills	All grades 11 Languages	Each Topic/ Ongoing	✓	✓		✓	Teachers may understand
SEACMEQ: Southern & East African Consortium for Education Quality	Regional Literacy & Numeracy comparison	- Regional comparison - African curriculum alignment	- Delay in analysis and reporting - Only measures ultimate skill - Intermediate phase focus – not Foundation Phase	Grade 6 11 Languages	Every 7-8 years	✓	✓	✓		Well understood at a policy level, regionally and internationally
ELNA: Early Learning National Assessment	Measuring school readiness	- Pre-schooling measure - Pre-literacy skills - School readiness alignment	Only for reception years and not all Foundation Phase	Grade R or start of Grade 1 11 Languages	3	✓	✓	✓		Report still to be published
Thrive by Five	Measures cognitive dev for 4-5-year olds	- Pre-literacy and numeracy skills - Cognitive development skills - Pre-school focus - physical, linguistic and socio-affective	Only for reception years and not all Foundation Phase	Grades RR & R 11 Languages	3	✓	✓	✓		Easy dashboard, policy notes, extensive reports, access to data
FUNS: Funda Uphumelele National Survey	10-year-old reading & earlier attainment	- Comparison to new African reading benchmarks by skill and grade - Nationally representative - Provincially representative - Linguistically representative - CAPS alignment	- Limited to selected oral skills - Assumes teachers have a remedial response	Grades 1-4 & 6	7-83	✓	✓	✓		Percentage reaching benchmarks by skill, grade and language

PART TWO: ESTABLISHMENT OF SOUTH AFRICAN READING BENCHMARKS

The Need for Early Grade Reading Benchmarks

A skill intrinsic to learning outcomes for any basic education department is ensuring that learners are able to read and make meaning of texts and ultimately be able to utilise the information for various purposes and in different modes; orally, written, or graphically. This is a lengthy learning process that extends beyond the years of formal schooling. That said, the first four years of formal instruction (Grades R-1) are crucial in laying a strong foundation that further learning and academic success can be built on. Thus, it is important to be able to measure age and grade appropriate development proficiency in reading to remediate and extend where necessary.

One of the key methods used to assess the competency achieved by learners in reading is through written comprehension. The assessment of this skill in this mode is informative for getting insight into the advanced skill of reading comprehension expressed in the written format. The most comprehensive data points of tracking progress in reading outcomes have largely been derived from group-administered literacy assessments measuring this skill as can be inferred in the table above. This skill, however, is not attained, let alone mastered in the early years of the reading journey, where individual oral assessment of key subskills is needed to capture its development. Therefore, the sector needed a metric for measuring foundational reading proficiency appropriate in the Foundation Phase.

Benchmarking Considerations for the South African Context

Literacy Skills to Benchmark

The acquisition of reading is a complex, non-linear, yet developmental process. It can be thought of as the product of interrelated, interdependent, and progressively evolving literacy skills. These precursor skills exist in two continuums. The first is that they either need to be explicitly taught or they are acquired as language proficiency grows. The second is that some of these early skills are constrained; that is, they can quickly be taught to high levels of mastery, while language and thinking skills are uncapped and continuously develop through instruction or exposure.

To exemplify, in alphabetic languages, the skill of alphabetic knowledge (knowing that letters (graphemes) represent different sounds (phonemes) in one's language) is a finite skill that needs to be explicitly taught and is constrained in that mastery is attainable for every normally developing child. Vocabulary on the other hand is a skill that is developed gradually by both exposure to the language and explicit teaching. Because of the ever-evolving nature of language expanding its lexical base, vocabulary cannot be thought of as having been mastered and children may display much variation. At a minimum, achievement levels can be recommended for grades and ages.

Holding in tension the intricacies inherent in reading and literacy development, the necessity for appropriate measurement of proficiency in grades 1, 2, and 3, and envisioned usefulness for the range of intended users, the choice of precursor skills to benchmark needed to be well considered. The skill that would be selected to set key milestones needed to meet the following criteria:

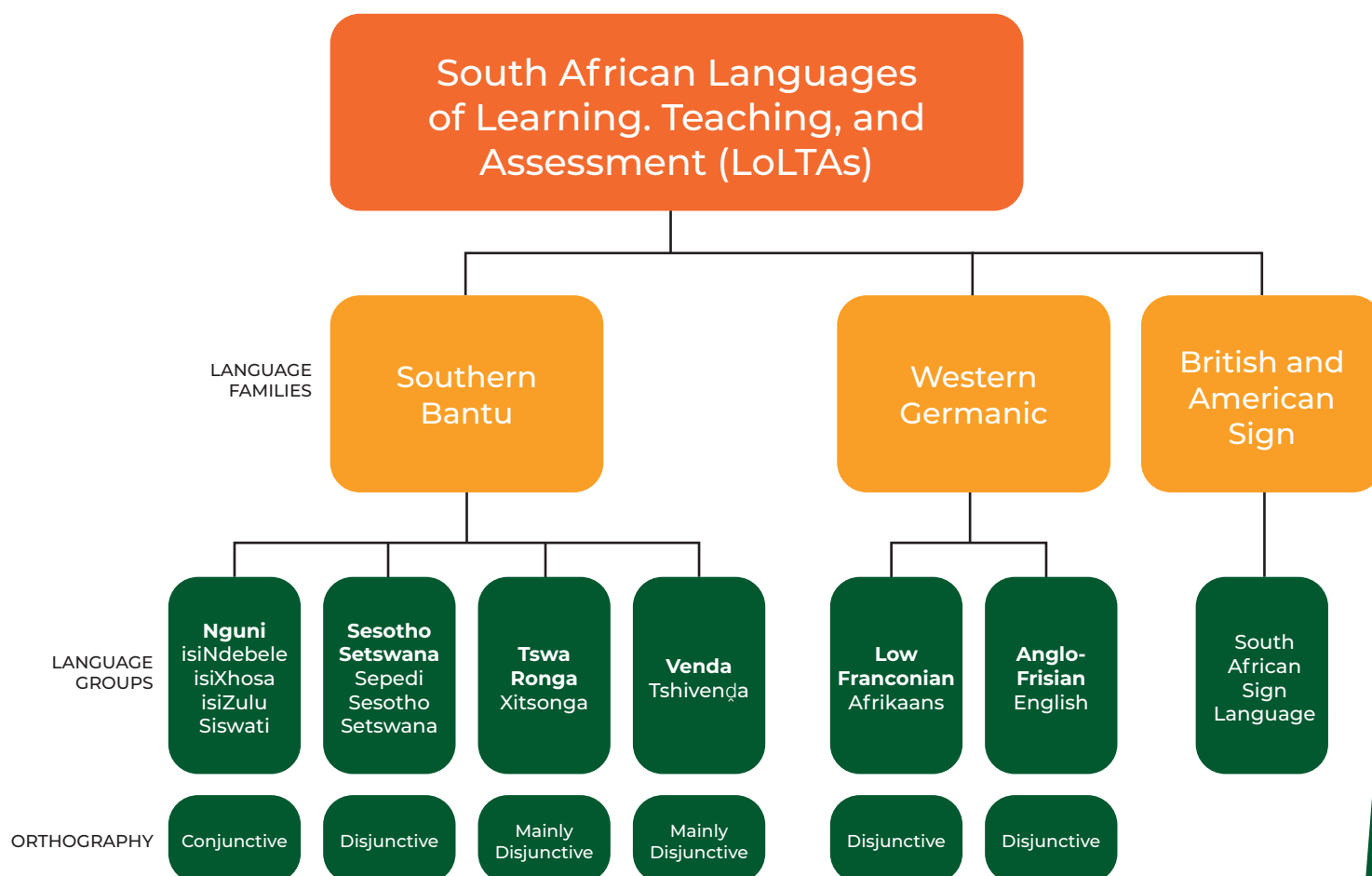
- a. have proven predictability for or facilitation of later written reading comprehension (observable by Grade 4);
- b. be explicitly taught and attainable (constrained skill) in the Foundation Phase curriculum;
- c. use a measurement matrix that is readily understandable and useful for different users; and
- d. be equally applicable and responsive to the South African educational context (e.g. linguistic diversity and socio-economic landscape).

Through an iterative and consultative process within the DBE, it was jointly decided that the South African Early Grade Reading Benchmarks (EGRB) that would communicate reading proficiency norms and standards in the Foundation Phase be measured using the skill fluency of fluency, which is an indicator that foundational reading knowledge has been internalised and consolidated. Both oral and silent reading fluency means that the text is read accurately with the correct expressions at an appropriate speed. Accurate reading exhibits that the reader is able to correctly apply their knowledge of how the sounds and words in their language are represented by letters in the case of alphabetic languages. Correct expression (prosody) requires a knowledge of the language's grammatical and speech rules translating to appropriate intonation, stress, and rhythm called for by the text. The rate (speed) at which a text is read is important as it signals the level of decoding automaticity attained by the emerging reader. Fluency meets the criteria set out in these ways: Fluency as an indicator of foundational reading ability in writing systems has relevance across a range of languages. However, linguistic and orthographic differences within and across these languages can result in different kinds of trade-offs in terms of cognitive load and ease of learning, as discussed below.

Languages to Benchmark

Linguistic considerations were necessary in establishing reading benchmarks in a multilingual context like South Africa where 11 of the spoken official languages are used as the Languages of Learning, Teaching, and Assessment in the Foundation Phase where learners are taught to read. There are language specific linguistic features that are implicated in teaching and learning to read for the respective languages. This in turn affects the acceptable fluency rates as they are largely dependent on the language's internal linguistic structures. This means that thresholds need not only be established to be grade appropriate, but also language specific. It was important to ensure that each language was considered as its own unique entity in the benchmarking process. As a case in point, while Afrikaans shares the orthographic transparent feature with the other African languages spoken in South Africa, it does not additionally share their agglutinating, syllabic features. English, in an even bigger contrast, is a partially analytic, stress-timed language with an opaque orthography (Spaull, Pretorius & Mohohlwane 2020).

Figure 2.1: Language groupings of South African spoken LOLTAs



Orthographic Transparency

The language groups taught in South African schools differ in orthography as can be seen in the figure above. Apart from where word boundaries begin and end - thus characterising the language's placement on the conjunctive-disjunctive spectrum - nuances can also occur in the transparency of a language's orthography or writing system. In a transparent orthography, there is a regular and highly consistent one-to-one mapping between the graphemes (letters) and the corresponding phonemes (sounds). For example, Afrikaans and the African languages have a transparent orthography where there is a high incidence of individual letters which represent only one sound. For example; the word /bona/ can be broken down into four letters [b] + [o] + [n] + [a] that map on to four phonemes /b/ + /o/ + /n/ + /a/. The Nguni languages have a transparent conjunctive orthography where grammatical morphemes are joined to their word stems (conjoined) whereas the Sesotho-Setswana group of African languages have a transparent disjunctive orthography where some morphemes are written as separate words.

In our country's context, English is the only language with an opaque (or deep) orthography where one grapheme or letter can map onto more than one phoneme or sound, or where one phoneme/sound can be represented by more than one grapheme/letter. For example, some of the one-to-many grapheme-to-phoneme mappings that English have include:

- The grapheme g represents the phonemes /g/ (as in go) and /dʒ/ (as in gene)
- The grapheme c represents the phonemes /k/ (as in cat), /s/ (as in ace) and /ʃ/ (as in ocean)
- The grapheme y represents the vowel phoneme /i/ (as in happy) and the consonant phoneme /j/ (as in yes)
- The grapheme -ough represents 5 different vowel phonemes as reflected in: bough, bought, dough, through, thorough as well as other phoneme combinations as in cough, rough and hiccough.

There are also many silent letters – ghost, knee, psyche, comb, pane, gnome, calm, cupboard, who. And - and many exceptions to words which use common GPMs, thereby increasing the learning load, for example come/home, one/bone, have/gave, do/go, does/goes.

Complex Consonants

Although the transparency of an orthography can be an advantage for young readers, other complexities in the orthography can create learning obstacles, such as overall size of the code set and the occurrence of complex consonants, graphemes, and vowel graphemes. Although the Roman alphabet comprises 26 letters, languages use these letters and combinations of letters differently to represent the set of phonemes in their language. For example, Finnish has 23 phonemes (but also non-Finnish phonemes in loan words), Sesotho has 37, English has 44 and isiZulu has 46. The smaller the phoneme-grapheme set, the quicker learners can master it.

Complex graphemes can also add to the cognitive load. These include digraphs where two graphemes (letters) (e.g. sh) represent one sound (/ʃ/)(e.g. ship /ʃɪp/) and trigraphs, where three letters (e.g. -tch) represent a single sound (/tʃ/), as in watch /wɒtʃ/. Another kind of complex consonant grapheme are consonant blends where two or more consonants follow one another without representing a single sound, but rather a sequence of consonant phonemes, e.g. umnqathe in isiXhosa, where the consonants m and nq (a nasalised version of the palatal click /q/) occur in sequence. The African languages have several consonants digraphs and trigraphs and various consonant blends. Xitsonga in particular has a large code set of simple and complex consonants represented as single, digraph, trigraph as well as two-letter, three-letter, four-letter and even five-letter consonant blends.

¹Probert, T., & De Vos, M. (2016). Word recognition strategies amongst isiXhosa/English bilingual learners: The interaction of orthography and language of learning and teaching. *Reading & Writing-Journal of the Reading Association of South Africa*, 7(1), 1-10.

Naturally, within the language groups there are also some differences in how some words with equivalent meaning take on different consonants or pronunciations. A good example of this is how in addition to the regular [s] in Sepedi, there is also the almost equally prevalent diacritic s [š] pronounced as the voiceless alveo-palatal fricative /ʃ/. However, the orthographic representation of this as a diacritic sound seldom occurs in Setswana and never occurs in South African Sesotho orthography. Another interesting difference is how the sound /tlh/ in both Sesotho and Sepedi is used for nouns e.g. tlhokomelo (care) and /hl/ for verbs, e.g. hlapa (bath). However, it is the opposite in Setswana, where the sound /tlh/ is used for verbs and /hl/ or /l/ is used for nouns. Digraph and trigraph consonants are less frequent in English in comparison to Southern Bantu languages, but these do exist, e.g. th, ph, sh. However, complex graphemes also pose orthographic complexity in English, particularly for vowels for example, -ea- is different in near and meat; the vowel in -ough is different in through, thorough and enough, and although -gh- is silent in the first two words, it represents the consonant /f/ in enough.

Unlike single letters representing a single sound which is not complicated to read and write since this involves a one-on-one mapping, complex consonant sequences can pose challenges for learners in the early stages of reading. Consonants are taught as separate sounds (phonemes) in single letters, digraphs and trigraphs, they are typically always taught before blends. The National Reading Framework (NRFW) states, “the African languages have a complex consonant system consisting of many digraphs, trigraphs and blends so young children need to habituate their eyes to recognising the letter combinations and matching them with their correct sounds” (p.21). Although complex consonants in the form of blends is not a ‘new’ sound, learners need to become familiar with their appearance in words as their combination in specific words produces unique sounds. In Xitsonga for example, the complex consonant ‘nkhw’ visually consists of four different consonant graphemes, but phonetically it is a combination of the single letter phoneme /n/, a digraph /kh/ and the glide /w/.

In addition, the Tshivenda orthography uses diacritics such as a circumflex accent below the letter to distinguish dental consonants (ḑ, ḽ, ṋ, ṽ) from their alveolar counterparts and an over dot for velar ṉ. Tshivenda language learners thus have 4 additional consonant graphemes to learn. Sepedi and Setswana also have a diacritic, a caron above the s (š) that signals a different sound /ʃ/.

Vowels

All eleven spoken South African languages, consists consist of three types of sounds: vowels, semi vowels/ glides and consonants. For most of the South African LoLTAs these grapheme vowelsvowel graphemes translate to seven phonemic (nine for Sesotho) vowels that differ according to the position of the tongue within the oral cavity during their articulation. Afrikaans, moreover, has a comprehensive vowel system of 17 vowels which includesinclude the five short vowels (a, e, i, o, u) in additionaladdition to vowels, long vowels, double vowels (diphthongs) and triple vowels. The presence of vowel complexity is illustrated through long vowels that can alter meaning (Barnby & McLachlan, 2022). (triphthongs).

The Nguni languages, unlike the Sesotho-Setswana languages, English and Afrikaans, do not permit the occurrence of two vowels in sequence within a word, (Sibanda 2009). The adopted strategy to avoid vowels being used together in a word. Instead, the Nguni languagelanguages use three strategies as a way of solvingto resolve double vowel sequencing: coalescence, Glidinggliding and Vowelvowel deletion throughout, (Sibanda 2009).. In the Sesotho-Setswana languages, there are no diphthongs,; however, there are combinations of some basic vowels, and double vowels, which are used to indicate one long sound. These sounds are usedoccur in idiophones or , for example, “Yoo!” “E-e”, and “Ai!” and used to great effect in storytelling.

²Department of Basic Education. (2020). National Framework for the Teaching of Reading in African Languages in the Foundation Phase 2020.pdf.

Orthography and Morphology

Morphology relates to word formation, focusing on the smallest unit of meaning within a word called a morpheme. There are different types of morphemes such as root, stem and grammatical morphemes. Grammatical morphemes do not have independent meaning but convey aspects of meaning such as plurality, gender/noun class, subject, direct or indirect object, size, location, position, tense, mood, and so on. The morphology of a word can also change its function, e.g. changing the verb ukwazi ('to know') to an abstract noun ulwazi ('knowledge'). Morphology has cognitive load implications for both word length and word complexity. Understanding morphemes is important for vocabulary development and meaning making.

In agglutinating languages, a vast amount of grammatical information is conveyed by morphemes within a single word, while in some languages like English separate function words can signal this information (e.g. pronouns, prepositions, direct/indirect articles), as well as inflected morphemes within a words (e.g. -the past tense suffix -ed as in jumped). This has orthographic implications because it means that in agglutinating orthographies, a single word can be quite long. It also means words may have a complex internal grammar that may be equivalent to a whole sentence in English, e.g. the single word Ngiyabafundela in isiZulu comprises 14 letters and translates into a five word sentence in English "I am reading to them".

Thus, although English has an irregular orthography, many short high frequency words occur (cat, fat, sat, red, mat, on, top, of etc) and average word length across most English texts is around 4 letters. In addition, many of these high frequency words include short function or grammatical words (the, he, she, in, on, to, here, that, but, etc), thereby reducing the number of morphemes per word. In English, shorter words and fewer morphemes within words arguably reduce cognitive load when reading at the word level. This may help to balance the cognitive demands of the irregular English orthography for novice readers.

In contrast, despite the transparent orthography of the African languages, the morphological structure of words is complex with many grammatical inflections. The conjunctive orthography of the Nguni languages in particular, means morphemes are added onto roots or stems and written together as a single word. This increases word length and word complexity, particularly in verbal elements (as in ngiyabafundela). Because the Nguni languages have many long, multi-syllabic words and very few monosyllabic words, this makes word recognition more challenging, since long words are common even in the early stages of reading.

Xitsonga, unlike Nguni languages, is written both disjunctively and conjunctively. The conjunctive writing is prevalent in compound words such as mutshami-wa-xitulu'. This word somehow reads like a sentence whilst it is 'mutshama-xitulu/mutshamaxitulu. The conjunctive style therefore presents long words. An example of disjunctive writing in Xitsonga language is: I n'wana wa mina (She is my child). The four words form a sentence in Xitsonga but are represented by two words in isiZulu uyingane yami.



Tonality

The Southern Bantu languages of South Africa also share the feature of being moderately tonal - where vowels (especially the mid-vowels e and o) can have two contrasting tones: low and high. Tonal languages like Mandarin and Cantonese have five and nine tones respectively. The most important property of tonal languages which distinguishes them from languages that use stress and pitch as part of intonation, is the existence of numerous tonal minimal pairs. Often, words may be composed of exactly the same letters and syllables yet have different tones. In Xitsonga, for example, chela (pour) and chela (frog) appear similar but they differ in the use of high or low tones on the first vowel which change the meaning of the word. Similarly, in Sesotho-Setswana, the words nòkà (waistline); nókà (spice the food) and nóká (river) are all spelled the same but have different meanings, even though the vowels are not annotated by accent marks to signal tonality in the regular orthographies.

Afrikaans and English do not utilise tone in the same way as tonal languages like Mandarin or Xitsonga. Instead, stress and intonation patterns convey word pronunciation, emphasis, emotion or nuances in meaning. For example, in English stress usually falls on the first syllable in a two-syllable noun (e.g. PREsent), but on the second syllable in a two-syllable verb (e.g. preSENT). This change in pronunciation is inferred from the context.

In sum, the discussion in this subsection draws attention to similarities and differences within and across languages and their orthographies, and the trade-offs in terms of cognitive load during reading when some easier orthographic or linguistic aspects are countered by some more demanding linguistic or orthographic aspects. Ultimately, all written languages present their own normative patterns of reading development according to their own linguistic and orthographic features, which will be reflected in their own reading fluency benchmarks.



Development of Benchmarks

The benchmarks were started with a design process convened by the DBE with multiple stakeholders including RTI International specialists who have led similar processes in other developing country contexts was initiated. The design process culminated in a Setting Reading Benchmarks report, documenting data approaches and empirical methodologies to support benchmarking. The design phase informed decisions on which grades and languages to benchmark; e.g. Grade 1, 2 and 3 respectively for Home Language. A further decision was taken to benchmark each language separately and then compare these benchmarks within each African language family. If consistent patterns emerged, then a language family benchmark could be adopted, this was found to be the case for Nguni languages and the Sesotho-Setswana languages.

The choice of which language to benchmark first was informed by the availability of existing reading data. For the Nguni language learner assessment data from five different studies resulted in the largest compilation of early grade reading assessment data in three Nguni languages: isiZulu, isiXhosa and Siswati was used. This included nearly 16,400 unique learners across 660 typically no-fee schools. No large-scale data was available for isiNdebele. The Sesotho-Setswana early grade reading benchmarks are based on reading assessments of more than 24,000 unique learners across more than 400 no-fee schools in the North West, Free State and Limpopo provinces. The Afrikaans benchmarks are based on data collected from 100 schools in 2022 in the Western Cape. However, these have now been revised through the Funda Uphumelele National Survey as data was more comprehensive, and the original benchmarks were created shortly after learning losses resulting from COVID-19.

The TshivendaTshivenḓa reading benchmarks are based on the reading assessment of more than 3,000 learners across 60 no-fee schools in Venda, in the Limpopo Province. The Xitsonga early grade reading benchmarks are based on reading assessments of more than 70007,000 unique learners and approximately 700 no-fee schools in the Limpopo province. Xitsonga benchmarks have also been adjusted using data from the Funda Uphumelele National Survey.

The English First Additional Language (EFAL) benchmarks drew on five different studies, data was compiled with multiple assessment points for over 20,000 unique learners from Grades 2 to 7, across 6 of 9 provinces. These data are almost exclusively drawn from no-fee schools. Finally, the English Home Language Benchmarks are based on data collected for this survey.

In summary, the benchmarks were created based on analysis of empirical South African learner data for each language; reading development theory for alphabetic languages; and scholarship on each language's linguistic features pertinent to reading development. The benchmarks as published to date are consistent and have been the measure used in the Funda Uphumelele National Survey (FUNS) with the exception of Afrikaans and Xitsonga which have been updated for Grade 2 and Grade 3.

The benchmarking work has been led by the DBE in collaboration with a strong coalition of donors, academics and officials including the DBE, United States Agency for International Development (USAID), the United Nations Children's Fund (UNICEF), Research on Socio-Economics Policy (ReSEP), the University of Cape Town (UCT), Funda Wandé, Old Mutual and Zenex Foundation have been collaborating in this work to date. The table. Table 2.2 below provides a summary of the reports and funding.

Summary of the Reading Benchmarks for Grades 1 to 3

The fluency rate in this context is measured on three levels: producing the correct sound (phoneme) in the target language visually represented by a single letter grapheme; and the accurate reading of a grade and context appropriate connected narrative text in each language. The benchmarks are thus expressed as the **minimum number** of letters learners should correctly sound out in one minute (CLSPM) or the **minimum number** of correct words read in a passage per minute (CWPM) necessary to be on track to read with adequate comprehension as shown in Figure 2. It is important to mention that although the mastery of these constraint skill does not directly cause comprehension, learners who read below these fluency rates are unlikely to access higher order reading skills and are unlikely to comprehend what they are reading.

Table 2.1: DBE Early Reading Fluency benchmarks for each language and grade

DBE Early Grade Reading Fluency Benchmarks			
Reading Fluency outcomes expected by the end of each grade's academic year			
Home Language	Grade 1	Grade 2	Grade 3
	Letter Sound Knowledge (LSK)	Oral Reading Fluency (ORF)	Oral Reading Fluency (ORF)
Afrikaans	40 CLSPM	45 CWPM	60 CWPM
English	40 CLSPM	50 CWPM	70 CWPM
Tshivenda	40 CLSPM	35 CWPM	55 CWPM
Xitsonga	40 CLSPM	35 CWPM	55 CWPM
IsiNdebele	40 CLSPM	20 CWPM	35 CWPM
IsiZulu	40 CLSPM	20 CWPM	35 CWPM
IsiXhosa	40 CLSPM	20 CWPM	35 CWPM
Siswati	40 CLSPM	20 CWPM	35 CWPM
Sepedi	40 CLSPM	40 CWPM	60 CWPM
Sesotho	40 CLSPM	40 CWPM	60 CWPM
Setswana	40 CLSPM	40 CWPM	60 CWPM
English First Additional Language	N/A	30 CWPM	50 CWPM

Table 2.2: Benchmarking Data Approaches Taken for Reports and Supporting Partners

Benchmarking Data Sourcing Approach	Benchmark Report Completion	Data Sources, Project Partners, and Funders
1. Nguni Language Group report		
Re-analysis of Existing Data	October 2020	Benchmark Reports: Technical Report- Benchmarking Early Grade Reading Skills in Nguni Languages; and Summary Report- Benchmarking in the Nguni Languages Department of Basic Education; NORC and Harris School of Public Policy (University of Chicago); ReSEP (Stellenbosch University), SALDRU (University of Cape Town), University of South Africa (UNISA). Data Sources and Funders: Early Grade Reading Study II; Department of Basic Education; Mpumalanga Provincial Education Department; Class Act; Khulisa Management Services; University of the Witwatersrand funded by USAID. Funda Wandé Evaluation; Eastern Cape Provincial Education Department; Funda Wandé (Eastern Cape); and SALDRU (University of Cape Town) funded by the Allan Gray Orbis Foundation Endowment. Leadership for Literacy; Department of Basic Education; ReSEP (Stellenbosch University), funded by the Economic and Social Research Council (ESRC). Story Powered Schools Impact Evaluation; NORC (University of Chicago); Dr. Alicia Menendez and Dr. Cally Ardington funded by USAID. Zenex Foundation Literacy Project (ZenLit); KwaZulu-Natal, Eastern Cape and Western Cape Provincial Education Departments; funded by the Zenex Foundation.
2. English (First Additional Language) report		
Collection of Top-Up Data	April 2022	Technical Report- English as a First Additional Language Benchmarking; and Summary Report- English as a First Additional Language Benchmarking Department of Basic Education (DBE); North West Provincial Education Departments; ReSEP (Stellenbosch University), SALDRU (University of Cape Town), University of Pretoria (UP); University of the North West (NWU); University of South Africa (UNISA); iKapa Data; Khulisa Management Services funded by USAID Data Sources and Funders: Early Grade Reading Study I Department of Basic Education (DBE), Department of Planning, Monitoring and Evaluation, (DPME); Gauteng and North West Provincial Education Departments; Class Act; Human Sciences Research Council (HSRC); International Initiative for Impact Evaluation (3ie); Khulisa Management Services; University of the Witwatersrand funded by Anglo American Chairman's Fund, USAID; UNICEF, and Zenex Foundation. Early Grade Reading Study II; Department of Basic Education; Mpumalanga Provincial Education Department; Class Act; Khulisa Management Services; University of the Witwatersrand funded by USAID. Early Grade Reading Programme Evaluation; Department of Basic Education (DBE); North West Provincial Education Department; Molteno Institute for Language and Literacy, Social Surveys Africa funded by Hempel Foundation, UNICEF and Zenex Foundation. Funda Wandé Evaluation; Funda Wandé (Limpopo); Limpopo Provincial Education Department; iKapa Data; and SALDRU (University of Cape Town) funded by the Allan Gray Orbis Foundation Endowment. Leadership for Literacy; Department of Basic Education; ReSEP (Stellenbosch University), funded by the Economic and Social Research Council (ESRC). Story Powered Schools Impact Evaluation; NORC (University of Chicago); Dr. Alicia Menendez and Dr. Cally Ardington funded by USAID.
3. Sesotho-Setswana Language Group report		
Collection of Top-Up Data	June 2022	Sesotho-Setswana Language Group Benchmarks Report; Technical Report- Sepedi Early Grade Reading Benchmarks; Technical Report-Setswana Early Grade Reading Benchmarks; and Summary Report-Setswana Early Grade Reading Benchmarks; Department of Basic Education (DBE); North West and Limpopo Provincial Education Departments; Funda Wandé; Room to Read; ReSEP (Stellenbosch University), SALDRU (University of Cape Town), University of the Free State (UFS); University of Limpopo; University of Pretoria (UP); University of the North West (NWU); University of South Africa (UNISA); iKapa Data; Khulisa Management Services funded by USAID and Zenex Foundation. Data Sources and Funders: Early Grade Reading Study I Department of Basic Education (DBE), Department of Planning, Monitoring and Evaluation, (DPME); Gauteng and North West Provincial Education Departments; Class Act; Human Sciences Research Council (HSRC); International Initiative for Impact Evaluation (3ie); Khulisa Management Services; University of the Witwatersrand funded by Anglo American Chairman's Fund, USAID; UNICEF, and Zenex Foundation. Funda Wandé Evaluation; Funda Wandé (Limpopo); Limpopo Provincial Education Department; iKapa Data; and SALDRU (University of Cape Town) funded by the Allan Gray Orbis Foundation Endowment. Room to Read EGRA Data; Room to Read (Limpopo); Limpopo Provincial Education Department. Save the Children Literacy Boost Study; Save the Children; and Free State Provincial Education Department
4. Afrikaans Language report		
Collection of Top-Up Data	October 2022	Afrikaans Early Grade Reading Benchmarks Report Department of Basic Education (DBE); Western Cape Provincial Education Department, SALDRU (University of Cape Town), Stellenbosch University (SU); and iKapa Data.funded by Funda Wandé.
5. Xitsonga Language report		
Dedicated data collection	October 2023	Xitsonga EGR Benchmarks Technical Report Department of Basic Education;(DBE); Limpopo Provincial Education Department; Data Innovators (DI), (University of the Free State (UFS); University of KwaZulu-Natal; University of Limpopo; Decipher Data; and Word Bank funded by Old Mutual Foundation.
6. Tshivenda Language report		
Dedicated data collection	November 2023	Tshivenda Benchmark Technical Report Department of Basic Education (DBE); Limpopo Provincial Education Department, University of South Africa (UNISA), Benita Williams Evaluation; Firdale Consulting; and Khulisa Management Services funded by USAID; and Zenex Foundation.

PART THREE: SURVEY INSTRUMENT DEVELOPMENT

Survey Assessment Tasks

The Funda Uphumelele National Survey set out to measure the literacy levels of Grade 1 to 4 learners against the adopted reading benchmarks for the precursory skills appropriate to early grade learners. As such, the assessment tasks administered were aligned to those of the early grade reading benchmarks. However, for the purpose of comprehensiveness and ascertaining comparability across skills, each grade was not only measured in the fluency tasks relevant to their benchmark, but also in additional competencies that are aligned to the curriculum. The table below details the skills assessed by grade and assessment details.

Table 3.1: Skills assessed by grade and assessment task

Skill Assessed	Grade 1	Grade 2	Grade 3	Grade 4	Assessment Task	No. of Items	Item Type	Max score	Task Duration
Learner-Enumerator (1-on-1) Tasks Orally Administered									
Phonological Processing	✓				Rapid Object Naming	1x 36 Picture Grid	Objects to be orally named	36	20 seconds
Phonemic Level Fluency	✓	✓	✓		Letter Sound Knowledge Task	1x 60 Letter Grid per language	Words to be orally read	60	60 seconds
Word Level Fluency	✓	✓	✓	✓	Isolated Word Reading	3x 60 Word Grids per language	Passage to be orally read	60	60 seconds
Passage Level Fluency	✓	✓	✓	✓	Oral Reading Fluency (ORF)	Depending on language	Passage to be orally read	*	60 seconds
Passage Level Fluency	✓	✓	✓	✓	Oral Reading Fluency (ORF)	Depending on language	Passage to be orally read	*	180 seconds
Oral Language Comprehension			✓	✓	Oral Reading Comprehension	5 x Questions	Questions to be orally answered	**	UNTIMED
Individual Learner Written Task Administered in Group Set-Up									
Written Comprehension			✓	✓	Passage Reading Comprehension	18 Questions	Questions to be answered in written format	18***	30 minutes
Semantics (Vocabulary)			✓	✓	Synonyms	5 Items	Prompts in written format	5	5 minutes
Semantics (Vocabulary)			✓	✓	Antonyms	5 Items	Prompts in written format	5	5 minutes

* max score for each passage is dependent on the number of words.

** max score for each oral comprehension task is dependent on the number of questions per passage.

*** Grade 3 had a maximum score of 15

****Same Oral Reading Fluency passage administered for 60 seconds to measure ORF and for 180 seconds to enable ORF comprehension measurement

Instrument Development Team

The FUNS process of developing valid and reliable assessment tools across eleven home languages and four grades surveyed included designing, piloting, quality assurance, standardisation, revisions, and final selection. These activities required a development team with diverse skillsets and experiences, including Language, Literacy, and Foundation Phase Specialists; Data Collection teams; project managers; and data analysts. The first two groups were mostly contracted service providers, and the latter two were part of the Technical Working Group (TWG) at the DBE.

Language, Literacy, and Foundation Phase Specialists

Firstly, teams of language and literacy specialists who have experience working in Foundation Phase Initial Teacher Education were tasked to develop grade and linguistically appropriate instruments using the guidelines provided by the TWG. These teams comprised of at least two specialists per language and were, for the most part, recruited from universities that are homebases of the languages they were responsible for. For example, the team for the Xitsonga development team were from the University of Limpopo and for Siswati and IsiNdebele from the University of Mpumalanga.

Data Collection Service Providers

Once these instruments were developed, they were piloted with learners over three rounds with to test the instrument appropriateness. To conduct these pilots, service providers with experience in collecting learner data were contracted. They were mainly responsible for recruiting enumerators, co-facilitating training with the TWG ahead of fieldwork, and managing fieldwork. The learner data collected from these pilots were analysed to refine and finalise the tools.

Technical Working Group

The Technical Working Group was made up of three officials from the Research Coordination, Monitoring, and Evaluation (RCME) directorate. These officials also led the work on benchmarks development. A representative from the Curriculum Directorate also supported the work. In addition to the officials, two Data Analysis Associate seconded to the directorate through donor funds supported the work. Finally, a dedicated Project Manager and a Research Associate were added. The TWG was supported by a Technical Advisor on selected aspects throughout the work with two additional Technical Advisors consulted for the quantitative analysis.

The scope of responsibility of Technical Working Group for the assessment development included:

- management of the day-to-day operations of the development process including recruitment;
- Developing and leading the assessment framework, piloting and survey design;
- provide technical guidance and development resources for assessment development
- provide training and set expectations for standardisation to the language specialists and practitioners
- communicate pilot data findings for instrument revisions
- conduct data quality checks prior to approval of the various deliverables
- approve deliverables for invoicing and payment

Task Development

At the inception of the project, the broader development team attended a two-day in-person development workshop where the scope of work and the specifications of the development were expounded. The workshop also allowed for members in the same language and language group to align and begin development together.

The TWG gave the teams guidelines on the specifications of each task and considerations to explore. These guidelines were largely based on data findings from literacy studies and benchmarking work previously conducted.

A. RAPID OBJECT NAMING

Design and Administration

The Rapid Object Naming (RON) task was used to assess the learner's phonological processing skill when they retrieve from memory and say the names of familiar objects presented in picture format. Learners are presented with a chart with six common images that are randomly repeated to produce a 36-item chart. Learners are expected to quickly say the name of the objects from left to right. In this task, learners were given 20 seconds (not communicated to learners) to name as many objects in the time as possible.

Development Guidelines and Resources

This task is one that has been in use for all the benchmarking data collection rounds. There was so no new development necessary. The language team's only action for this was to quality assure that the names of the objects were correct. in each language.

B. LETTER-SOUND KNOWLEDGE

Design and Administration

In a language with an alphabetic writing system, it is imperative that learners are taught the visual representation of phonemes (sounds) and graphemes (letters) so that they can connect the sound they hear with the letter that represents that sound. A letter chart of 60 items consisting of all the letters of the alphabet appearing in random order but prioritising those that exist in each respective language in both upper and lower case was presented to learners. Learners are required to say the sound of each letter in their language. They are given 60 seconds to attempt as many letter sounds as they can.

Development Guidelines and Resources

To develop the Letter-Sound Knowledge chart, the Development Teams were provided with NEEDU's Phonics Progression Programme, instruments from their language's benchmarking data collection efforts as a model, as well as the following guidelines to ensure consistency in rigour across the languages.

FURS Letter Sound Chart Distribution Guideline

1. All vowels are represented at least once in the first 4 rows in both upper- and lowercase
2. No letter sound appears more than 3 times in any form
3. All letters appear in both uppercase and lowercase. Prioritise uppercase letter sounds that are dissimilar from their lowercase counterparts: A, B, D, E, G, H, I, L, N, Q, R, T
4. Uncommon letter sounds only appear for the first time from row 3
5. Non-existent letter sounds only appear for the first time from row 4

Both the lower and upper versions of these letter sounds appear at least once in rows 1-4. **UNLESS** the sound has been identified as uncommon or non-existent; then refer to 4 and 5 above.

Figure 3.1: FURS Letter sound chart distribution guideline

	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Notes
	How many vowels appear in this row?	Which consonants should appear in this row?	Which vowels and consonants should appear in uppercase?	How many uppercase letters in this row?	When are these sounds taught?
Row 1	3 (lowercase)	b, m, l, d, f, b, t, p, k, j, n, f, g, s, c, h	B, D, G, H, L, N, Q, R, T	3	Single Letter Sounds taught in Grade 1 Term 1 and 2 (NEEDU Phonics Progression)
Row 2	remaining 2 (lowercase)			4	
Row 3	A, E, I (uppercase)	v, r, q, x, w, y, z AND any unused consonants in row 1 and 2	A, E, I, + 2 unused uppercase consonants from row 1-row 2	5/6	Single Letter Sounds taught in Grade 1 Term 1 - 4 (NEEDU Phonics Progression)
Row 4	O, U (uppercase)		O, U +2 unused from row 1-3	4	
Row 5	None	uncommon consonant sounds + unused from row 3-4	uncommon consonant sounds + unused from row 3-4	5	Single Letter Sounds taught Grade 1 Term 3- 4 (NEEDU Phonics Progression) remaining. Sounds that are uncommon and no existent in language that are not explicitly taught
Row 6	None	non- existent + unused from row 4-5 + repeats	non- existent + unused from row 4-5 + repeats	5	

*Non-existent sounds are sounds not native to a language but that occur in the broader context (e.g. /r/ in isiZulu)

C. ISOLATED WORD READING

While benchmarks have been created and shared for letters and Oral Reading Fluency, internal word reading benchmarks have been developed for internal use. These were developed similarly to letter and ORF, the word benchmarks measure the accurate reading of isolated, decontextualised words that are decodable or sight words in the respective language and grade.

Design and Administration

The Isolated Word Reading task assesses a learner's ability to fluently read as many decontextualised words from a 60-word chart as they can. The learners are allowed to decode the words by blending their sounds or syllables if they cannot immediately read the word correctly. They are given 60 seconds to read as many words as possible

Development Guidelines and Resources

The development teams for each language were requested to provide three lists of common and decodable words for grades 1-3. Where available, the teams were provided with word charts from their language's benchmarking documents, the Vula Bula high frequency word lists and were also required to consult the curriculum for vocabulary words provided. In the creation of the lists, language teams were encouraged to collaborate in their language groups where they shared the same benchmarks.

After drafting each grade's list of words, the words were further categorised into three levels: easy words, moderate words, and difficult words. The teams were required to provide criteria for allocation of words in the different categories. One of the criteria of categorisation was utilising the NEEDU Phonics scheme to ascertain which words would be readily decodable based on the word's composition of phonic sounds and when those sounds would have been taught in the different terms of the corresponding grade.

Each language's word lists were then compiled into a spreadsheet create the different chart versions piloted, the words were randomly selected according to the three difficulty categories. The distribution of the three categories of words in the charts can be seen below.

Table 3.2: FUNS Word Chart Distribution Guideline

	Grade 1 15 WCPM	Grade 2 25-30- WCPM	Grade 3 35-40 WCPM
ROW 1	FIRST 5x EASY WORDS	FIRST 5x EASY WORDS	FIRST 5x EASY WORDS
ROW 2	FIRST 5x MODERATE WORDS	FIRST 5x MODERATE WORDS	FIRST 5x MODERATE WORDS
ROW 3	FIRST 5x DIFFICULT WORDS	NEXT 5x EASY WORDS	NEXT 5x MODERATE WORDS
ROW 4	NEXT 5x EASY WORDS	FIRST 5x DIFFICULT WORDS	FIRST 5x DIFFICULT WORDS
ROW 5	NEXT 5x MODERATE WORDS	NEXT 5x MODERATE WORDS	NEXT 5x MODERATE WORDS
ROW 6	NEXT 5x MODERATE WORDS	NEXT 5x EASY WORDS	NEXT 5x MODERATE WORDS
ROW 7	NEXT 5x EASY WORDS	NEXT 5x MODERATE WORDS	NEXT 5x EASY WORDS
ROW 8	NEXT 5x EASY WORDS	LAST 5x DIFFICULT WORDS	LAST 5x DIFFICULT WORDS
ROW 9	LAST 5x DIFFICULT WORDS	NEXT 5x MODERATE WORDS	NEXT 5x MODERATE WORDS
ROW 10	LAST 5x MODERATE WORDS	LAST 5x EASY WORDS	LAST 5x EASY WORDS
ROW 11	LAST 5x EASY WORDS	LAST 5x DIFFICULT WORDS	LAST 5x DIFFICULT WORDS
ROW 12	LAST 5x DIFFICULT WORDS	LAST 5x MODERATE WORDS	LAST 5x MODERATE WORDS

D. ORAL READING FLUENCY PASSAGE

Design and Administration

The Oral Reading Fluency task is a task where learners are provided with a passage to read aloud to the enumerator. Similar to the Isolated Word Reading task, learners are not penalised for decoding words in the passage by blending its sounds or syllables if they cannot immediately read it. A carefully selected picture is included with the passage. It relates to the content of the passage but cannot be directly used to answer any of the comprehension questions that are posed on the question. They are not provided with the title of the passage. This decision stems from learnings from previous benchmarking piloting where weaker readers would compose their own narrative based on the title instead of attempting to read the text.

This design of this task is adapted from RTI's Early Grade Reading Assessment Toolkit. Where the original EGRA allocates one minute for the task, our design extends this time to allow learners three minutes to attempt to get through as much of the text as possible. The number of words attempted in the first 60 seconds, however, is also captured and used to calculate the learner's fluency rate (Correct Words Per Minute (CPWP) ORF score. The the three minute administration is also measured and captured and used to enable the administration of a broad set of ORF comprehension questions.

Development Guidelines and Resources

For the Oral Reading Fluency task, each language team was requested to originate one narrative passage for each grade (Grade 1-4) with an accompanying English translation. Other language teams would then be provided with the English translation and requested to version the story into their own language ensuring that the same content and level of detail was included. The themes were to be age appropriate as well as culturally and contextually relevant. Stories about rural life or folklores with talking animals were discouraged as there is a plethora of these types of narratives already in circulation, especially for African languages. For the length of the passages per grade, each language team was requested to refer to the passage length guide below. This was developed based on the benchmarking data of learners' average number of words they could attempt in the allotted time.

Table 3.3: FURS Passage Length Guidelines Oral Reading Fluency

Grade	Criteria	Language/Language Group					
		Nguni	Xitsonga	Tshivenda	Sesotho-Setswana	English FAL	Afrikaans
Grade 1	No. of words for 3 min reading	25-35	35-45	40-50	60-70	55-65	60-70
Grade 2	Benchmark	20 WCPM	30 WCPM	35 WCPM	40 WCPM	30 WCPM	50 WCPM
	No. of words for 3 min reading	75-80	100-110	120-130	180-190	180-190	170-180
Grade 3	Benchmark	35 WCPM	40 WCPM	55 WCPM	60 WCPM	50 WCPM	80 WCPM
	No. of words for 3 min reading	95-100	100-110	180-190	210-220	210-220	210-220
Grade 4	Benchmark	45 WCPM	50 WCPM	65 WCPM	70 WCPM	70 WCPM	90 WCPM
	No. of words for 3 min reading	125-135	110-120	240-250	330-340	300-310	260-270
Grade 6	Benchmark	70 WCPM	85 WCPM	90 WCPM	95 WCPM	100 WCPM	120 WCPM
	No. of words for 3 min reading	150-160	200-210	330-340	390-400	390-400	340-350

A. ORAL READING FLUENCY COMPREHENSION QUESTIONS

Design and Administration

The passage reading in the Oral Reading Fluency Passage is usually followed by comprehension questions asked orally to the learner by the enumerator. As mentioned earlier, in a conventional EGRA, a learner is allocated one minute to read the passage. The learner is then asked five comprehension questions about the passage, but the number of questions asked depends on how far the learner has managed to read the passage. Because of the short time, these passages tend to be very short and simple texts which lend themselves mostly to literal questions. By extending the time to three minutes, learners are able to be provided with longer passages that allow for more content to be read and a wider range of comprehension questions asked.

Development Guidelines and Resources

There are different taxonomies available for developing comprehension questions. For the benchmarking processes and by extension FURS, the chosen taxonomy was the Progress in International Reading Literacy Study (PIRLS) conceptual framework. This taxonomy has four questions question types to assess learners' comprehension and processing. The teams were provided with the PIRLS Item Writing Guideline as well as this Question Distribution Guide. Each passage was required to have a minimum of 7 questions. Varieties of the same kinds of questions were also developed and tested; however, in the final versions 12 questions were posed per passage. At least 60% of the questions were required to have appeared in the first half of the passage.

Table 3.4: PIRLS taxonomy of comprehension item types

Question Type	Grade 1	Grade 2	Grade 3	Grade 4	Grade 6
Focus on and Retrieve Explicitly Stated Information	50%	50%	35%	20%	20%
Straight forward Inference	30%	25%	25%	30%	30%
Interpret and Integrate	20%	25%	25%	30%	30%
Examine and Evaluate			15%	20%	20%

B. WRITTEN COMPREHENSION: TEXT COMPREHENSION

The written comprehension text administered in the survey was a released literary passage from the PIRLS. For comparability, this task was for the most part unaltered. The language team was requested to review the text along with the questions and flag any language or lexical issues that needed.

The format of the selected PIRLS assessment was the easier prePIRLS format where sections of the text are provided on one side of the page and relevant questions given on the opposite page, with spaces for answers where necessary. In other words, the questions are not all posed at the end of the text. The Grade 3s were assessed on fifteen questions and the Grade 4s were assessed on all eighteen questions of the same text.

Piloting of Instruments

Once the initial development of the assessment tasks was completed, the tasks went through an iterative process of piloting before finalisation. After each of the three pilots, the learner data was analysed by the data analysis team and provide feedback to the language team for revision. The key aims of the piloting and revision process depicted in figure 3 were:

1. Develop new assessments that are language-specific and secure
2. Ensuring assessments are set at the right level; no floor or ceiling effects
3. Ensure language appropriateness for the context with comprehension questions asked that are unambiguous
4. Ensure appropriate length of the individual tasks and full assessment
5. Assess the suitability of the task's the difficulty level relevant to the grade and curriculum specifications

Figure 3.2: Iterative Instrument Piloting and Revision Process



The pilots were conducted in the 11 official South African languages and five grades (Grades 1-4 and Grade 6). In each grade and language, multiple language proficiency tasks were undertaken, including Rapid Object Naming (RON), Letter Sound Knowledge (LSK), Word Reading, Oral Reading Fluency (ORF), Comprehension, Morphological Awareness, and Written tasks. Each pilot was slightly different with respect to which tasks were administered and in which grades.

The pilots ran between July and October 2024. Pilot 1 was administered over 22 - 26 July 2024, Pilot 2 over 01-04 October 2024, and Pilot 3 over 08-14 October 2024. The purpose of the pilots was to assess how well different components of the tool were working and to create appropriate assessments. Each pilot was used to inform the next pilot.

Assessment Components

In Pilot 1, the assessments consisted of 11 tasks: Rapid Object Naming (RON), Letter Sound Knowledge (LSK), Home Language Word Reading (HL Words), English First Additional Language Word Reading (EFAL Words), three Home Language Oral Reading Fluency tasks (ORF 1, ORF 2, ORF 3), three comprehension tasks (Comp 1, Comp 2, Comp 3), and a written task (Written). Table 3.5 displays the spread of tasks over grades for Pilot 1.

Table 3.6 shows the spread of tasks over grades for Pilot 2, and Table 3.7 displays the same for Pilot 3. Pilots 2 and 3 were similar to Pilot 1 with two changes to the tasks: Both Pilots 2 and 3 did not include the LSK task and instead included a morphological awareness task. Pilot 3 also included an additional ORF task (ORF 4) and associated comprehension task (Comp 4). The grades over which each task was assessed shifted slightly between pilots.

In every task except the Written task, learners were opted out of the task if they answered the first five items incorrectly. If learners opted out of the ORF tasks, then they did not attempt the Comprehension or Written tasks.

Table 3.5: Assessment components across grades, Pilot 1

Task	Grade 1	Grade 2	Grade 3	Grade 4	Grade 6
Rapid Object Naming Task	20s	20s			
Letter Sound Knowledge Task	60s	60s	60s		
HL Word Reading Task	180s	180s	180s		
EFAL Word Reading Task		180s	180s		
HL Oral Reading Fluency Task 1	180s	180s	180s	180s	180s
HL Oral Reading Fluency Task 2	180s	180s	180s	180s	180s
HL Oral Reading Fluency Task 3		180s	180s	180s	180s
HL Comprehension Task 1	180s	180s	180s	180s	180s
HL Comprehension Task 2	180s	180s	180s	180s	180s
HL Comprehension Task 3		180s	180s	180s	180s
Written Assessments				Untimed	Untimed



Table 3.6: Assessment components across grades, Pilot 2

Task	Grade 1	Grade 2	Grade 3	Grade 4	Grade 6
Rapid Object Naming Task	20s				
HL Word Reading Task	180s	180s	180s		
EFAL Word Reading Task		180s	180s		
HL Oral Reading Fluency Task 1	180s	180s	180s	180s	180s
HL Oral Reading Fluency Task 2	180s	180s	180s	180s	180s
HL Oral Reading Fluency Task 3	180s	180s	180s	180s	180s
HL Comprehension Task 1	180s	180s	180s	180s	180s
HL Comprehension Task 2	180s	180s	180s	180s	180s
HL Comprehension Task 3	180s	180s	180s	180s	180s
Morphological Awareness	untimed	untimed	untimed		
Written Assessments			untimed	untimed	untimed

Table 3.7: Assessment components across grades, Pilot 3

Task	Grade 1	Grade 2	Grade 3	Grade 4	Grade 6
Rapid Object Naming Task	20s				
HL Word Reading Task	180s	180s	180s		
EFAL Word Reading Task		180s	180s		
HL Oral Reading Fluency Task 1	180s	180s	180s	180s	180s
HL Oral Reading Fluency Task 2	180s	180s	180s	180s	180s
HL Oral Reading Fluency Task 3	180s	180s	180s	180s	180s
HL Oral Reading Fluency Task 4			180s	180s	180s
HL Comprehension Task 1	180s	180s	180s	180s	180s
HL Comprehension Task 2	180s	180s	180s	180s	180s
HL Comprehension Task 3	180s	180s	180s	180s	180s
HL Comprehension Task 4			180s	180s	180s
Morphological Awareness	untimed	untimed	untimed		
Written Assessments			untimed	untimed	untimed

Intended and Realised pilot samples

Tables 3.8 to 3.10 below display the learners sampled for each pilot. The target sample size within language and pilot was 12 learners for Grades 1 and 2, and 10 learners for Grades 3, 4, and 6, totaling 54 learners per school at 55 schools across six provinces (Limpopo, Mpumalanga, Eastern Cape, Gauteng, Free State, and Northwest). These provinces were selected so that all 11 languages would be covered by the pilots.

In the tables, the orange highlighted cells are those where the sample size is slightly below the target (50-54 learners). The red highlighted cells are those where the sample size is more than 10% below the target (<50 learners). Across the three pilots, the sample sizes were below target in most cases. There were also some instances where the realized samples were higher than the target.

In Pilot 1, the average sample per grade and language was 44 learners. This ranged from a low of 20 learners in Sesotho for Grade 4 and a high of 61 learners in SiSwati, Xitsonga, and Sepedi in Grade 1. Overall for Pilot 1, a quarter of samples met or exceeded the target, 13% were within 10% of the target, and the remaining (almost two-thirds) were more than 10% below the target.

In Pilot 2, none of the samples met the target. All samples were more than 10% below. The average sample size was 34 learners, with a low of 7 for Afrikaans in Grade 3, and a high of 48 for SiSwati in Grade 1 and Tshivenda in Grades 4 and 6.

In Pilot 3, the average sample per grade and language was higher at 48 learners. The proportion of samples meeting the target was 20%, and the proportion within 10% of the target was an additional 38%, leaving less than half below 10% of the target. While this is much closer than Pilots 1 and 2, the target was still not met in Pilot 3 by a long way. The lowest sample in Pilot 3 was 30 learners in Sesotho in Grade 3, and the highest was 60 learners in Xitsonga in Grade 4.

Although there were some logistical difficulties encountered in all three pilots, which reduced the realized sample sizes, it is still clear that a thorough process of assessing adequately large samples of learners across three consecutive pilots was followed to inform the FUNS instrument development process.

Table 3.8: Learner sample, Pilot 1

Language	Grade					Total
	1	2	3	4	6	
Afrikaans	55	52	48	30	46	231
English	52	42	34	27	40	195
IsiNdebele	59	57	36	51	45	248
IsiXhosa	42	37	36	41	45	201
IsiZulu	55	43	39	32	39	208
Sepedi	61	58	47	24	41	231
Sesotho	57	42	39	20	33	191
Setswana	58	38	35	19	32	182
SiSwati	61	53	47	48	42	251
Tshivenda	60	55	46	27	50	238
Xitsonga	61	59	50	51	31	252
Total	621	536	457	370	444	2,428

Table 3.9: Learner sample, Pilot 2

	Grade					
Language	1	2	3	4	6	Total
Afrikaans	30	29	7	32	23	121
English	27	27	18	30	16	118
IsiNdebele	31	38	32	38	33	172
IsiXhosa	35	31	21	25	32	144
IsiZulu	37	38	37	36	43	191
Sepedi	34	35	30	38	26	163
Sesotho	41	41	28	36	20	166
Setswana	35	36	33	35	44	183
SiSwati	48	38	22	41	44	193
Tshivenda	38	40	39	48	48	213
Xitsonga	41	39	40	39	29	188
Total	397	392	307	398	358	1,852

Table 3.10: Learner sample, Pilot 3

	Grade					
Language	1	2	3	4	6	Total
Afrikaans	55	53	38	46	37	229
English	51	49	48	37	43	228
IsiNdebele	56	53	52	53	36	250
IsiXhosa	50	50	31	54	48	233
IsiZulu	54	43	39	54	54	244
Sepedi	57	55	57	54	52	275
Sesotho	36	50	30	42	17	175
Setswana	50	50	42	43	47	232
SiSwati	53	55	49	49	42	248
Tshivenda	56	55	54	55	55	275
Xitsonga	50	51	49	60	43	253
Total	568	564	489	547	474	2,642

The sample sizes are also reduced by opted out learners, and when conducting item analysis, sample size of items appearing later in the task is reduced further by the number of learners who do not reach later items in the given time.

Ceiling and Floor Effects

This section shows the floor and ceiling effects of each task, where ceiling effects indicate that a task is too easy for the population sampled, and floor effects indicate that the task is too difficult. In each of the tables the left-hand-side (labelled “Ceiling (%)”) of the table shows the proportion of learners scoring above 80% on the task, while the right-hand-side (labelled “Floor (%)”) displays the proportion of learners scoring zero. There is no universally agreed upon ceiling or floor cut-off, but here cells are highlighted in orange if we see greater than 10% of learners scoring above 80% or scoring zero, and red if the proportion is greater than 20%.

Table 3.11 below shows the floor and ceiling effects for the Rapid Object Naming (RON) task. There is only one case of more than 10% of learners scoring above 80% for the RON task (Grade 1, Pilot 2, Sesotho: 12%) and no other cases for concern.

Table 3.11. Pilot Ceiling and floor effects, RON

Language	Ceiling (%)				Floor (%)			
	Grade 1 Pilot 1	Grade 1 Pilot 2	Grade 1 Pilot 3	Grade 2 Pilot 1	Grade 1 Pilot 1	Grade 1 Pilot 2	Grade 1 Pilot 3	Grade 2 Pilot 1
Afrikaans	0	0	0	0	0	0	4	2
English	0	0	2	0	0	0	0	2
IsiNdebele	0	6	2	0	0	10	2	2
IsiXhosa	0	0	0	3	0	3	2	0
IsiZulu	0	0	0	0	2	3	2	0
Sepedi	0	0	0	0	0	0	0	0
Sesotho	0	12	0	0	2	0	0	0
Setswana	0	0	0	0	0	0	0	0
SiSwati	0	0	0	0	3	0	0	2
Tshivenda	0	0	0	0	0	0	0	0
Xitsonga	0	0	0	0	2	0	0	0

Table 3.12 and 3.13 below shows the Ceiling and floor for the English First Additional Language (EFAL) Word Reading task. There are many cases of both ceiling and floor effects in EFAL. This speaks more to the large variation in ability within classrooms rather than issues with the level at which the task was set.

Table 3.12: Pilot Ceiling effects, EFAL

Language	Pilot 1 (%)		Pilot 2 (%)		Pilot 3 (%)	
	Grade 2	Grade 3	Grade 2	Grade 3	Grade 2	Grade 3
Afrikaans	9	18	31	43	44	42
English						
IsiNdebele	9	3	24	22	21	29
IsiXhosa	6	25	10	38	20	35
IsiZulu	7	21	8	24	9	18
Sepedi	9	2	17	47	18	26
Sesotho	7	15	20	29	10	30
Setswana	14	12	14	24	20	24
SiSwati	14	10	16	50	13	10
Tshivenda	7	7	17	31	11	24
Xitsonga	5	26	3	10	4	14

Table 3.13: Pilot Floor effects, EFAL

Language	Pilot 1 (%)		Pilot 2 (%)		Pilot 3 (%)	
	Grade 2	Grade 3	Grade 2	Grade 3	Grade 2	Grade 3
Afrikaans	29	40	48	29	31	53
English						
IsiNdebele	40	14	39	31	55	35
IsiXhosa	22	11	29	29	68	52
IsiZulu	21	29	42	43	35	44
Sepedi	54	33	40	23	56	56
Sesotho	43	13	39	43	54	53
Setswana	41	24	42	48	50	43
SiSwati	38	35	34	18	44	35
Tshivenda	49	39	30	26	45	41
Xitsonga	17	2	56	35	59	45

The tables below show the ceiling and floor effects for ORF task 1. The first table presents Grade 1 results with other grades following. Once again, there are many cases of both ceiling and floor effects, with floor effects decreasing and ceiling effects increasing in later grades (despite the different passages used). The same pattern was observed for ORF 2, ORF 3 and ORF 4.

Table 3.14. Ceiling and floor effects, Grade 1 ORF 1

Language	Ceiling (%>80)			Floor (%=0)		
	Pilot 1	Pilot 2	Pilot 3	Pilot 1	Pilot 2	Pilot 3
Afrikaans	12	17	13	50	33	60
English	15	30	18	40	37	46
IsiNdebele	3	19	15	76	29	45
IsiXhosa	2	6	10	62	56	74
IsiZulu	5	8	7	82	68	67
Sepedi	8	24	7	63	53	86
Sesotho	0	29	3	79	34	75
Setswana	5	11	18	84	71	68
SiSwati	0	27	15	88	44	58
Tshivenda	7	24	34	58	33	50
Xitsonga	13	15	16	67	70	60

Table 3.15: Ceiling and floor effects, Grade 2 ORF 1

Language	Ceiling (%>80)			Floor (%=0)		
	Pilot 1	Pilot 2	Pilot 3	Pilot 1	Pilot 2	Pilot 3
Afrikaans	0	45	46	53	21	25
English	7	56	57	24	8	12
IsiNdebele	0	39	26	35	18	23
IsiXhosa	0	13	22	19	52	52
IsiZulu	0	16	19	49	34	49
Sepedi	0	46	24	53	31	53
Sesotho	5	37	30	69	24	34
Setswana	3	42	52	43	28	30
SiSwati	0	34	31	48	29	31
Tshivenda	0	63	40	40	18	25
Xitsonga	0	23	20	41	38	45

Table 3.16: Ceiling and floor effects, Grade 3 ORF 1

Language	Ceiling (%>80)			Floor (%=0)		
	Pilot 1	Pilot 2	Pilot 3	Pilot 1	Pilot 2	Pilot 3
Afrikaans	0	57	50	60	0	21
English	59	88	60	0	0	19
IsiNdebele	3	25	39	17	19	12
IsiXhosa	11	48	55	14	38	16
IsiZulu	0	43	26	21	30	41
Sepedi	7	50	32	28	37	39
Sesotho	10	61	50	18	7	27
Setswana	9	52	52	26	30	24
SiSwati	5	64	48	41	23	29
Tshivenda	7	74	67	28	10	15
Xitsonga	20	68	43	12	15	35

Table 3.17: Ceiling and floor effects, Grade 4 ORF 1

Language	Ceiling (%>80)			Floor (%=0)		
	Pilot 1	Pilot 2	Pilot 3	Pilot 1	Pilot 2	Pilot 3
Afrikaans	13	41	37	20	16	20
English	44	83	57	0	7	14
IsiNdebele	4	13	9	20	24	11
IsiXhosa	7	20	7	12	32	19
IsiZulu	0	3	6	22	22	43
Sepedi	8	13	0	29	37	35
Sesotho	5	3	22	15	21	6
Setswana	0	3	9	28	20	14
SiSwati	4	24	4	16	7	33
Tshivenda	11	19	15	15	8	7
Xitsonga	2	5	5	4	8	18

Table 3.18. Ceiling and floor effects, Grade 6 ORF 1

Language	Ceiling (%>80)			Floor (%=0)		
	Pilot 1	Pilot 2	Pilot 3	Pilot 1	Pilot 2	Pilot 3
Afrikaans	4	17	32	7	22	20
English	58	88	49	10	0	14
IsiNdebele	20	18	17	4	18	11
IsiXhosa	7	3	10	2	16	19
IsiZulu	3	5	4	21	17	43
Sepedi	.	8	0	0	19	35
Sesotho	13	15	12	6	5	6
Setswana	6	14	17	10	5	14
SiSwati	2	0	0	12	7	33
Tshivenda	6	6	2	4	4	7
Xitsonga	0	7	7	0	0	18



Revisions to ORF passages through piloting

Revisions on the passages in preparation for main data collection were made based on length, word complexity and coherence for their grade. The tables below were also used to make decisions on passage length based on the number of words the learners attempted in each passage. The tables below show the average number of words attempted by grade for ORF 1 – 4 for pilot 3 in 180 seconds. Similar tables for Pilot 1 and 2 can be found in the pilot report.

Table 3.19. Average number of words attempted on ORF 1, Pilot 3

Language	Grade 1 Mean (N)	Grade 2 Mean (N)	Grade 3 Mean (N)	Grade 4 Mean (N)	Grade 6 Mean (N)
Afrikaans	41 (16)	78 (26)	108 (20)	169 (19)	238 (16)
English	37 (20)	98 (33)	105 (31)	175 (21)	270 (21)
IsiNdebele	28 (12)	43 (15)	57 (24)	78 (25)	101 (16)
IsiXhosa	28 (8)	59 (12)	63 (17)	88 (21)	132 (18)
IsiZulu	29 (9)	44 (11)	51 (12)	75 (14)	101 (21)
Sepedi	47 (5)	76 (14)	101 (20)	136 (18)	196 (25)
Sesotho	32 (3)	75 (18)	101 (16)	160 (16)	218 (8)
Setswana	41 (10)	98 (26)	109 (21)	146 (17)	213 (23)
SiSwati	25 (13)	51 (24)	60 (23)	79 (20)	97 (15)
Tshivenda	42 (19)	81 (25)	105 (33)	133 (23)	174 (22)
Xitsonga	38 (10)	78 (15)	97 (22)	119 (25)	155 (18)

* Excludes learners who opted out

Table 3.20. Average number of words attempted on ORF 2, Pilot 3

Language	Grade 1 Mean (N)	Grade 2 Mean (N)	Grade 3 Mean (N)	Grade 4 Mean (N)	Grade 6 Mean (N)
Afrikaans	63 (14)	133 (16)	155 (15)	104 (27)	226 (17)
English	60 (15)	151 (26)	173 (24)	105 (28)	279 (15)
IsiNdebele	39 (10)	64 (14)	73 (19)	62 (26)	93 (16)
IsiXhosa	30 (5)	78 (12)	75 (13)	69 (35)	111 (19)
IsiZulu	36 (7)	50 (11)	74 (8)	60 (21)	92 (24)
Sepedi	43 (5)	94 (11)	101 (16)	101 (20)	177 (20)
Sesotho	33 (3)	87 (15)	153 (11)	114 (26)	185 (7)
Setswana	55 (7)	122 (20)	133 (15)	112 (25)	182 (22)
SiSwati	35 (10)	61 (16)	72 (23)	63 (24)	77 (16)
Tshivenda	63 (17)	93 (17)	138 (22)	107 (41)	166 (24)
Xitsonga	49 (11)	91 (13)	117 (17)	104 (40)	153 (20)

* Excludes learners who opted out

Table 3.21. Average number of words attempted on ORF 3, Pilot 3

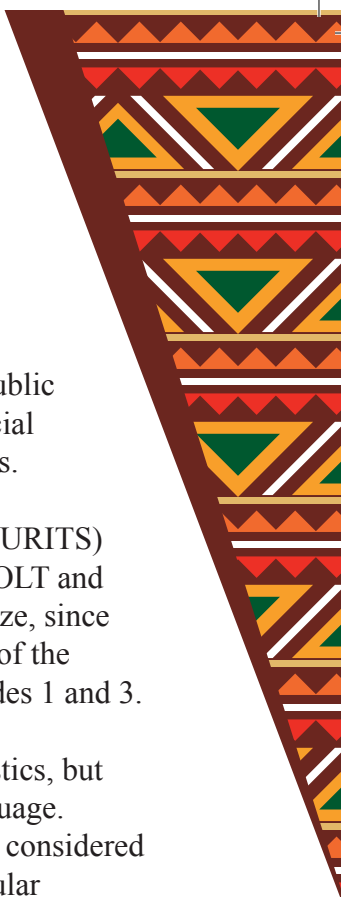
Language	Grade 1 Mean (N)	Grade 2 Mean (N)	Grade 3 Mean (N)	Grade 4 Mean (N)	Grade 6 Mean (N)
Afrikaans	61 (14)	55 (11)	121 (8)	168 (21)	191 (18)
English	45 (13)	58 (17)	133 (14)	198 (18)	214 (28)
IsiNdebele	30 (12)	36 (19)	64 (23)	89 (17)	91 (11)
IsiXhosa	28 (5)	40 (9)	78 (9)	101 (22)	122 (23)
IsiZulu	29 (7)	35 (7)	56 (13)	86 (14)	104 (25)
Sepedi	33 (4)	54 (10)	105 (18)	124 (15)	193 (18)
Sesotho	33 (3)	57 (12)	111 (14)	156 (14)	204 (7)
Setswana	48 (8)	67 (20)	115 (11)	154 (20)	188 (24)
SiSwati	33 (10)	38 (10)	68 (13)	96 (20)	87 (16)
Tshivenda	50 (18)	58 (15)	119 (16)	152 (22)	158 (22)
Xitsonga	46 (8)	54 (9)	102 (18)	148 (24)	152 (20)

* Excludes learners who opted out

Table 3.22. Average number of words attempted on ORF 4, Pilot 3

Language	Grade 1 Mean (N)	Grade 2 Mean (N)	Grade 3 Mean (N)	Grade 4 Mean (N)	Grade 6 Mean (N)
Afrikaans	167 (12)	218 (16)	259 (19)	104 (27)	226 (17)
English	.		.		.
IsiNdebele	98 (14)	140 (16)	177 (13)	62 (26)	93 (16)
IsiXhosa	115 (8)	150 (22)	209 (19)	69 (35)	111 (19)
IsiZulu	123 (10)	141 (17)	217 (24)	60 (21)	92 (24)
Sepedi	121 (12)	158 (12)	225 (18)	101 (20)	177 (20)
Sesotho	173 (7)	169 (9)	240 (6)	114 (26)	185 (7)
Setswana	132 (12)	163 (15)	232 (16)	112 (25)	182 (22)
SiSwati	126 (18)	164 (18)	195 (17)	63 (24)	77 (16)
Tshivenda	151 (18)	142 (21)	185 (22)	107 (41)	166 (24)
Xitsonga	157 (7)	148 (12)	191 (19)	104 (40)	153 (20)

* Excludes learners who opted out



PART FOUR:

DESIGN AND COMPOSITION OF THE SAMPLE

Sample design

The target population for FUNS was all grade 1-4 learners in South Africa South attending public ordinary schools where the Language of Learning and Teaching (LOLT) is any of the 11 official spoken languages. This meant excluding all independent schools and all special needs schools.

Administrative data from the 2023 Learner Unit Record Information and Tracking System (LURITS) was used to generate a sampling frame, since this data had the most up-to-date grade-level LOLT and enrollment information available. Grade 2 learner enrollments were used as the measure of size, since this grade has a lower repetition rate than grade 1, meaning it is a more stable representation of the underlying learner population. It is also likely to provide a good estimate of the LOLT in grades 1 and 3.

The aim of the FUNS sampling was to ensure not only precise nationally representative statistics, but also a satisfactory level of precision and representation for every province and for every language. Therefore, the size of the learner population within each province-language combination was considered in determining the sample design. However, it should be noted that the sample for any particular language-province combination is in most cases not large enough to make precise estimates. There are some exceptions, such as Setswana in the North West Province or Tshivenda in Limpopo, where it was necessary to draw larger samples from these province-language combinations. It should also be noted that the FUNS sample does not allow district-level estimates of reading outcomes.

Table 4.1 reports the proportion of schools in each province that use each of the languages as the LOLT, after excluding independent schools and special needs schools. For example, about 75% of Eastern Cape Grade 2 learners learn through isiXhosa as the LOLT, whereas hardly any learners have isiNdebele, IsiZulu, Sepedi, Setswana, Siswati, Tshivenda or Xitsonga as their LOLT. In cases where a particular language represented less than 3% of a province’s population, it was excluded from the sample frame, since it would not justify the cost of fieldwork. However, there were some exceptions in cases where that province-language combination accounted for a sizable proportion of that language’s population. For example, although Xitsonga only represents 1.11% of Gauteng’s population, that group of learners accounts for 6.71% of the population of Xitsonga learners, as Table 4.2 shows. The difference between Table 4.1 and Table 4.2 is that in Table 4.1 the row percentages for each province sum to 100%, whereas in Table 4.2, the row percentages for each language sum to 100%.



Table 4.1: Distribution of LOLT within each province

	Afrikaans	English	IsiNdebele	IsiXhosa	Isizulu	Sepedi	Sesotho	Setswana	Siswati	Tshivenda	Xitsonga	Total
EC	7.32	15.43	0.00	75.46	0.00	0.00	1.77*	0.00	0.01	0.00	0.00	100
FS	8.63	29.17	0.02	1.34	1.83*	0.00	54.66	4.32*	0.00	0.00	0.03	100
GP	6.40	63.47	0.11	2.12*	10.74	4.90*	4.24*	6.54	0.01	0.35	1.11*	100
KZN	0.39	27.08	0.01	2.56*	69.93	0.00	0.01	0.00	0.00	0.00	0.01	100
LP	1.10	4.86*	0.52*	0.06	0.45	59.09	0.00	1.10	0.00	15.96	16.85	100
MP	2.98	25.37	6.85*	0.01	19.06	8.43	0.14	1.61	26.65	0.00	8.88	100
NC	49.87	14.29	0.01	2.57	0.01	0.01	0.09	33.12	0.02	0.00	0.00	100
NW	5.38	11.86	0.00	1.63	0.00	0.00	2.15*	78.98	0.00	0.00	0.00	100
WC	37.48	40.32	0.00	22.13	0.00	0.00	0.07	0.00	0.00	0.00	0.00	100

Notes: This table presents the proportion of eligible schools in each province that use various languages as the language of teaching and learning (LOLT). Row totals sum to 100. Shaded blocks are those where the proportion of schools in the province that use the language as a LOLT is less than 3% and were hence excluded as strata in the sampling frame. There are some exceptions (*) where although the in-province proportion is less than 5%, there is a sizeable proportion of that LOLT schools which are in that province. Data Source: LURITS 2023

Table 4.2: Distribution of province within each LOLT

LOLT	EC	FS	GP	KZN	LP	MP	NC	NW	WC	Total
Afrikaans	10.79	5.35	13.64	0.94	1.58	2.91	15.39	4.10	45.29	100
English	6.80	5.40	40.41	19.31	2.10	7.40	1.32	2.70	14.56	100
IsiNdebele	0.06	0.14	3.00	0.29	9.79	86.69	0.03	0.00	0.00	100
IsiXhosa	73.39	0.55	2.98	4.03	0.06	0.01	0.52	0.82	17.65	100
IsiZulu	0.00	0.54	10.89	79.40	0.31	8.86	0.00	0.00	0.00	100
Sepedi	0.00	0.00	10.05	0.00	82.02	7.92	0.00	0.00	0.00	100
Sesotho	5.50	71.40	19.05	0.05	0.00	0.29	0.06	3.46	0.19	100
Setswana	0.00	2.97	15.45	0.00	1.76	1.74	11.33	66.76	0.00	100
Siswati	0.07	0.00	0.12	0.04	0.00	99.76	0.02	0.00	0.00	100
Tshivenda	0.00	0.00	3.14	0.00	96.84	0.02	0.00	0.00	0.00	100
Xitsonga	0.00	0.05	6.71	0.04	68.70	24.51	0.00	0.00	0.00	100

Based on the size of the learner populations observed in Table 4.1 and 4.22, a sampling design was selected to optimise the precision achievable for each language and for each province, but within an overall “budget” of 710 schools nationally. The planned number of schools in each province-language strata is shown in Table 4.3.

In addition to the 710 sampled schools, a further 710 replacement schools were drawn. Replacement schools were sampled from the same language, quintile and district.

The approach was to sample at least 59 schools in each province and at least 59 schools in each language. In some provinces, this resulted in exactly 59 schools being sampled. However, in Limpopo and Mpumalanga much larger samples as certain languages are almost exclusively spoken in these provinces. For example, the entire Tshivenda sample had to be drawn from Limpopo, yet Sepedi and Xitsonga are also predominantly spoken in Limpopo, thus necessitating a larger overall sample for Limpopo.

Table 4.3: Number of schools sampled by province-language combo

LOLT	EC	FS	GP	KZN	LP	MP	NC	NW	WC	Total
Afrikaans	2	5	5				31	5	20	68
English	5	5	19	8	4	5	6	5	23	80
IsiNdebele					6	53				59
IsiXhosa	49		2	2					16	69
IsiZulu		3	10	49		5				67
Sepedi			7		42	10				59
Sesotho	3	43	8					5		59
Setswana		3	3				22	44		72
Siswati						59				59
Tshivenda					59					59
Xitsonga			5		39	15				59
Total	59	59	59	59	150	147	59	59	59	710

The shaded cells with no numbers in Table 4.3 indicate where the underlying learner population was small enough that it was excluded from the sample design. It was further decided to exclude particularly small schools (less than 13 learners enrolled in grade 2) since the sampling plan was to assess 10 learners per grade. Such exclusions are commonly done in sampling to save costs, but it is then important to ensure that a relatively small overall proportion of the population of interest is excluded. Overall, this sampling design meant that 3.8% of the population of learners in public ordinary schools was excluded from the sampling frame. This is within acceptable norms. Table 4.4 shows the percentage excluded in each province, while Table 4.5 shows the percentage excluded for each language. The worst affected provinces were the Eastern Cape (8.15%) and Mpumalanga (6.4%), while the worst affected languages were isiXhosa (8.6%), Afrikaans (7.2%) and isiNdebele (6.9%).

Table 4.4: Percent of learner population excluded from the sampling frame by province

Province	Percent excluded
EC	8.1%
FS	3.1%
GP	2.0%
KZN	3.7%
LP	3.9%
MP	6.4%
NC	4.9%
NW	2.7%
WC	0.8%
Total	3.8%

Table 4.5: Percent of learner population excluded from the sampling frame by language

LOLT	Percent excluded
Afrikaans	7.2%
English	1.7%
IsiNdebele	6.9%
IsiXhosa	8.6%
IsiZulu	3.4%
Sepedi	1.5%
Sesotho	3.8%
Setswana	4.9%
SiSwati	0.9%
Tshivenda	4.7%
Xitsonga	0.8%
Total	3.8%

¹Of an initial 1,045,220 gr2 enrolments, we drop 64,632 in private schools, 15,375 in Special Needs Schools; and 37,283 in small province-language combinations and small schools (<13 enrolments). This makes a total of 117,290 learners that were excluded from the sampling frame - amounting to about 11.2% of the population. However, since those in independent schools and Special Needs Schools are not part of the population we are interested in reporting on, we are excluding only 3.8% of the intended population of interest.



Sampling weights

Within each province-language strata, the chosen number of schools was then randomly selected with probability proportional to size (PPS), with grade 2 enrolments being the measure of size. This means that although schools were randomly selected within each strata, a school with 100 grade 2 enrolments had twice as much chance of being selected as a school with 50 grade 2 enrolments in the same province-language strata.

Within each strata, the randomly selected sample of 10 learners per grade in each randomly selected schools will be “self-weighting” to be representative of the population of that strata, due to the PPS. However, when calculating any statistics across strata, such as national statistics, the sample still has to be weighted so that each learner carries an appropriate weight in proportion to the number of other learners in the sample they represent. For example, children in the 59 Tshivenda schools in Limpopo represent a much smaller population than children in the 49 isiZulu schools in KZN.

Sampling weights were therefore derived by dividing the total number of schools in a stratum by the number of schools in that stratum and then further adjusted by multiplying these by the average number of grade 2 enrolments in a stratum. The weights were then further adjusted for each grade to account for any schools where a particular grade was not assessed due to data collection issues. For example, if the intended sample for a particular stratum was 5 schools but only 4 schools actually had grade 1 learners assessed, then those 4 schools were given weights to represent the entire population of that stratum. A final adjustment to each learners’ weight was made to account for cases where fewer than 10 (or in a few cases, more than 10) learners were assessed. For example, if only 5 grade 1 learners in a school were assessed, then each of these learners were given twice the weight they would have been given if 10 learners had been assessed.

In all the analysis presented in this report, the sampling weights are applied to that the results are representative of the population of learners.

School validation

Following the sampling, a school verification process was implemented as an essential step to confirm key details, identifying potential challenges in advance, and ensuring that the randomly sampled schools met the necessary criteria for language representation and learner distribution in each province. Independent administrators were hired by the DBE to conduct the school verification calls from mid-October 2024 to early December 2024. Their primary role was to contact each school and confirm important details, including: the LOLT in both the Foundation and Intermediate Phases; additional languages offered; the number of learners per grade; school contact information and school Principal updated contact details.

Table 4.6 shows the verification flow process. The full 710 schools were called and a further 20% of the replacement schools were also validated. Replacement schools were selected from the same language, quintile and district to ensure a high match to the original sample. If no suitable replacement was available within the district, a school from a different district but within the same quintile was selected. From the 710 initially samples 611 schools, 86%, were validated. The remaining 99, 14%, schools could not be validated and were replaced. The reasons for this included schools failure to reach schools after three attempts, incorrect school contact information and no information found through alternative means or incidents where the LOLT was incorrect. This final list was provided to the service provider for school appointments.

Table 4.6: Verification process flow chart

STEP 1A	Call using the number given (Master list database) and confirm/request information. Attempt TWICE on number supplied before heading to STEP 1B-D
STEP 1B	Check school details on Data Driven Districts. DDD: https://www.dbedashboard.co.za/
STEP 1C	Google School making sure you check EMIS number
STEP 1D	Request replacement school
STEP 2B-D	Highlight Non-Verified Schools and compile in on a separate sheet for weekly check-ins
STEP 1D	Request replacement school
STEP 2B-D	Highlight Non-Verified Schools and compile in on a separate sheet for weekly check-ins

Field Work School Replacement

While every effort was made to collect data from the sampled schools, there were some cases where replacement of schools was needed. A protocol on this was developed and included in the training and monitoring. Replacement could only happen after three reasonable attempts to schedule an appointment. A reasonable attempt included calls, a physical visit to the school if it is in the same area as another scheduled school visit, and engaging the Circuit Manager to assist in contacting the school.

Where the fieldwork company became aware of planned interruption to the school visit before the scheduled visit, the appointment was rescheduled. Causes of this included early school closure, water shortages, school trips or external events, strikes or service delivery protests and memorial services.

Finally, a school could be replaced if the principal refuses to cooperate despite reasonable attempts to schedule an appointment. This includes informing the Department of Basic Education (DBE) of the situation before replacement.

Out of the 710 schools provided for data collection, 596 schools (84% of the sample) were successfully reached and 114 schools were replaced based on the protocol. The main reasons for the changes were that six schools were duplicates, 18 schools had an incorrect LOLT match including recent changes in LOLT and five schools were affected by teacher union strikes in Mpumalanga.

Selection of learners in each school

Once at schools, fieldworkers administered a protocol to identify all learners in each targeted grade that were learning through the LOLT for which the school was selected. Absent learners were excluded from the sampling frame. A method was then applied to randomly select 10 learners from each grade, with learners in different classes equally likely to be selected.

Realized Sample

After school replacements, the realised sample of schools was very close to the intended sample size of 710 schools. For the grade 1 sample, 708 schools were assessed. For the grade 2 sample, 710 schools were assessed; for the grade 3 sample, 709 schools were assessed; and for the grade 4 sample, 698 schools were assessed.

The total number of learners assessed and retained in the final dataset for analysis is presented in Table 4.7. There were also 109 assessments where learners refused to participate or where the sampled learners became unavailable. This corresponds to a non-response rate of less than 1%. There were a further 92 assessments where the fieldwork protocol was not followed and learners were assessed in the wrong grade. These have been excluded from the data.

Table 4.7: Realised learner sample size in each grade

Grade	Numbers in final sample for analysis
Grade 1	6987
Grade 2	6987
Grade 3	6984
Grade 4	6880
Total	27838

Training took place from the 18th to the 25th of January. A total of 191 trainees attended, of which 3 did not pass the oral assessment tests. These three fieldworkers were deployed, but were only allowed to assist with sampling, logistics and written assessments. Eventually, 189 fieldworkers were deployed to the field.

Eleven simulation schools covering all languages were visited for practical exercises on the 21st and 22nd of January, whereafter debriefing and re-training were implemented.



PART FIVE: DATA COLLECTION

Data collection took place from 27 January 2025 and was initially planned to conclude by 28 February 2025. Due to the strike action, data collection was concluded in early March 2025.

Data collection was preceded by an intensive seven-day training for field officers from January 18-24, 2025. A total of 189 field officers, proficient in all eleven official languages, participated in the workshop. This included in-school simulation in eleven schools covering all languages, for practical training on the 21 to 22 January, followed by debriefing and re-training on areas identified for strengthening.

The training covered key areas such as survey administration, sampling, and tablet use, along with language-specific instruction. Inter-rater reliability assessments were a core part of the training, which served as feedback to the training team as well as the fieldworkers. More than 7 assessments were completed in total, and this was part of the data used to finalise fieldworker selection. The training was led by the DBE, with support from language specialists, and the data collection service provider.

FUNS Fieldwork monitoring and data quality assurance

Fieldwork monitoring was conducted to ensure fidelity to assessment protocols, gauge the quality of data collection, and identify challenges in field implementation. Observations focused on the performance of fieldworkers, adherence to procedures, the assessment environment, and overall coordination with school staff.

A total of 25 monitoring visits were conducted across 21 unique teams working in 11 languages and 9 provinces. While some teams were visited more than once, 16 teams (37.2%) were not observed during the fieldwork period. Monitors included both DBE staff and Geo-Space staff, with DBE conducting most visits (19 out of 27 monitored teams).

Monitoring Field Officer Performance

The section below outlines the feedback collected from both DBE and Geo-Space staff who conducted field monitoring during the assessment period. This feedback is broken down into observations related to protocol adherence, field officer performance, school coordination, and overall assessment implementation.

Protocol Adherence

Sampling protocols were consistently followed across teams, with no major deviations observed, and challenges such as delays in obtaining class lists did not compromise the integrity of the sampling process. However, some variation was noted in the delivery of instructions and administration of assessments: while most field officers adhered to the scripted guidance, a few paraphrased or improvised, which may have affected standardisation. Similarly, the application of key “Golden Rules”, such as the five-second rule and the requirement to continue assessments when learners opted out of a section, was inconsistent, with some field officers offering excessive assistance or skipping sections.

Learner Engagement and Comfort

Many field officers succeeded in creating a supportive environment that helped learners feel comfortable and engaged; however, in several instances, learner autonomy was compromised when field officers completed examples on behalf of learners or did not provide sufficient reassurance or orientation support.

Language and Tablet Proficiency

Most field officers demonstrated proficiency in the language of assessment and showed confidence in using tablets; however, there were some concerns regarding their understanding of phonemic components, such as letter sounds, as well as minor issues related to tablet navigation and task loading.

Time Management and Coordination

While most assessments commenced on time, a few experienced delays due to logistical challenges such as extended assemblies or difficulties obtaining class lists. The average assessment duration ranged from 20 to 23 minutes per learner, with a few outliers, and inconsistent time entries. For example, “0 minutes” was flagged for further clarification.

School-Level Coordination

Most teams efficiently collected information on school timetables and arranged principal and teacher interviews in advance; however, there were isolated cases where interviews were not confirmed or scheduled, and in some schools, early dismissals or immunisation activities disrupted assessment timelines.

Written Assessments and Interviews

Written assessments were generally well administered, with clear instructions and appropriate learner guidance; however, some field officers did not invigilate adequately, resulting in issues such as learners copying from one another or beginning incorrect tasks. Principal and teacher interviews were mostly completed as planned, though a few instances of insufficient probing or misunderstanding of interview content were noted.

Team Leader Feedback

Nearly all team leaders (97.7%) confirmed that they had read and understood the Fieldwork Protocol Document, with only one team, the Tshivenda team, raising questions about protocol application, specifically regarding the verification of absent learners and the scheduling of assessments in schools with early dismissal. Clear guidance and flexibility were provided to address these concerns.

Challenges Identified

Several logistical issues were reported, including late or incorrect class lists, difficulties locating schools, and inaccuracies in the recorded LoLT. Environmental constraints also affected fieldwork quality, as conducting assessments in shared spaces led to distractions and disorderly school environments disrupted planned activities. In addition, some protocol gaps were identified where field officers were not observed due to time constraints or the simultaneous assessment of multiple learners, which limited effective evaluation.

Principal and School Feedback

Principals and educators generally provided positive feedback, noting the professionalism, clear communication, and preparedness of the teams. However, a few concerns were raised regarding late confirmation of visits, limited staff availability at schools, and small team sizes that affected assessment coverage.



Moderation:

Moderation was a critical quality assurance component of the assessment process, aimed at verifying the accuracy and consistency of scoring by fieldworkers. Moderation was conducted in two phases: 1) moderation of written assessments and 2) moderation of oral assessment recordings. The moderators were made up of both DBE (internal) and Geo-Space (external) staff to ensure objectivity and comparability of results.

A stratified 10% sample of learner written assessments was selected for moderation across five weekly batches; this covered a period from 7 February to the week ending 7 March 2025. The sampling process of written assessments to moderate included the following steps:

- Only learners that gave consent to participate in the assessment were considered
- Learners were categorised based on when their assessment took place using the last two digits of their learner ID. Only S1 – S10 learners were kept, replacement learners were excluded.
- Learners with IDs ending in 01, 02 or 03 (S1 – S3) were classified as “early assessments” S8 – S10 learners were classified as “late assessments” Learners who fell outside these ranges i.e S4 – S7, were excluded from the sample in order to have a balanced sample of learners that were assessed earlier and those that were assessed later on.
- A uniform random number was generated and used to randomly select a 10% sample, stratified by grade and school.
- The selected records were shared with the external service provider

To provide an additional layer of quality assurance, DBE staff re-moderated a subsample of the first batch of written assessments initially reviewed by the service provider:

- A random sample of 10 learner scripts per language was selected (total of 110 scripts).
- Random selection was stratified by language to ensure representation.
- Scripts were re-assessed by internal DBE moderators in their respective languages.

A comparative analysis was conducted to assess scoring consistency between fieldworkers, external moderators, and internal (DBE) moderators. In one story task, four learner scripts had score differences greater than 30% between external moderators and fieldworkers. These were all from English assessments in Gauteng.

Comparisons between DBE moderators and fieldworkers showed discrepancies exceeding 30% in 14 scripts:

- 7 in English (Western Cape)
- 3 in IsiZulu (KwaZulu-Natal)
- 4 in SiSwati (Mpumalanga)

Moderation of oral assessments involved evaluating audio recordings of learner assessments to verify how accurately and consistently fieldworkers administered the tasks. The sampling strategy included the following:

- Only learners with valid consent and complete audio recordings were eligible.
- To reduce bias from practice effects, the first two assessments by each enumerator were excluded.
- A maximum of two recordings per fieldworker was selected using a random rank order.
- The final sample included at least one recording per fieldworker.

A formal comparison was conducted between the scores assigned by fieldworkers and those by internal moderators for each oral task. Discrepancies were flagged where the difference exceeded 30%. The tasks with the highest number of flagged discrepancies were:

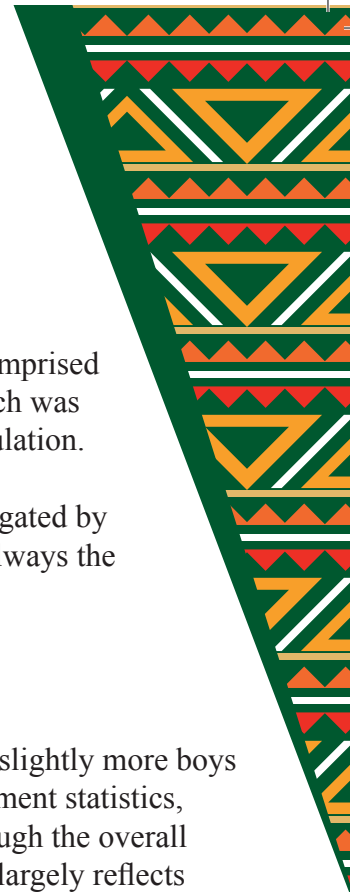
- Letter Sound Recognition – 24 scripts
- ORF 1 (Oral Reading Fluency 1) – 27 scripts
- ORF 2 (Oral Reading Fluency 2) – 23 scripts
- ORF 1 Comprehension – 20 scripts

Most discrepancies occurred in Gauteng and Mpumalanga learner assessments.

In conclusion the moderation process, made up of moderation for both written and oral components, provided a robust mechanism to validate the reliability of assessment scoring. The re-moderation analysis offered valuable insights into moderation effectiveness.

1. Dashboard
2. Data Cleaning: Key Issues and Resolutions





PART SIX: SURVEY RESULTS

Description of FUNS sample characteristics

As outlined in an earlier section, the Funda Uphumelele National Survey (FUNS) sample comprised learners in Grades 1 to 4 drawn from 710 schools across South Africa. The sampling approach was designed to achieve national, provincial, and language representativeness of the learner population.

This section presents the demographic and contextual characteristics of the sample, disaggregated by gender, age, province, language of assessment, and learner home language (which was not always the same as the language of assessment), as well as by school poverty quintile.

Learner gender

Table 6.1.1 presents the number of boy and girl learners sampled in each grade. In all cases, slightly more boys than girls were included in the sample. This pattern is broadly consistent with national enrolment statistics, which show that approximately 52% of learners enrolled in Grades 1 to 5 are boys, even though the overall population of boys and girls is roughly equal. The higher proportion of boys in these grades largely reflects higher rates of grade repetition among boys.

Table 6.1.1: Number of boy and girl learners sampled in each grade

Grade	Boy	Girl	Total
1	3683	3304	6987
2	3681	3306	6987
3	3643	3341	6984
4	3491	3389	6880
Total	14498	13340	27838

Learner age

Table 6.1.2 presents the distribution of learner age for each grade in the sample. Because the data collection happened very early in the school year, it is important to note that what is referred to throughout this report as “Grade 1” corresponds to children at the start of their Grade 2 year, and similarly, “Grade 2” refers to children at the start of their Grade 3 year, and so forth. For this reason, the age distribution appears slightly older than one might normally expect for the grade labels used in this report.

The average ages observed are generally in line with expectations, given national enrolment patterns. A small number of surprisingly older ages were recorded, and these have been replaced to be missing due to the likelihood that this was caused by fieldworker error. For example, there were a few learners who were 13 or older in grade 1 and some grade 4 learners older than 15.

Table 6.1.2: Learner age across the grades

Grade	count	mean	min	p10	p25	p50	p75	p90	max
1	6938	7.2	4	6	7	7	8	8	12
2	6969	8.3	4	7	8	8	9	9	13
3	6964	9.4	4	8	9	9	10	10	14
4	6847	10.4	8	9	10	10	11	11	15

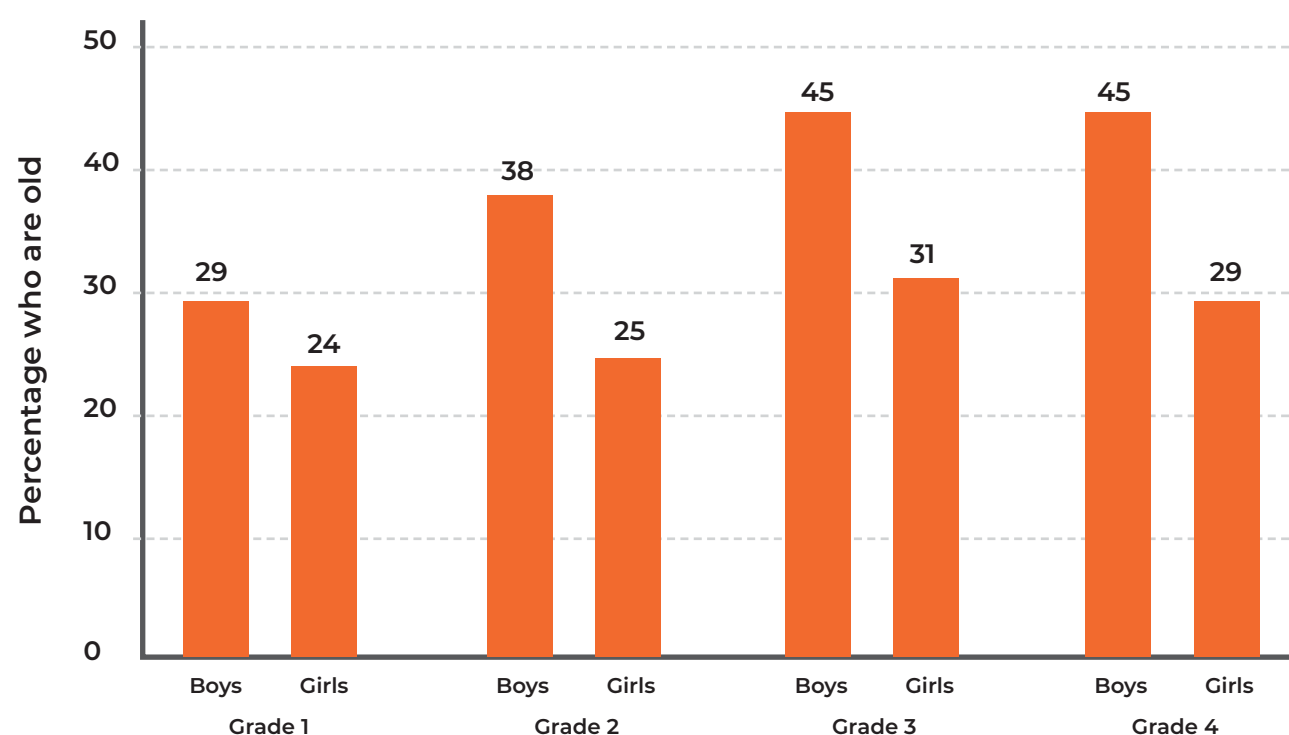
Note: Data are weighted to represent population characteristics

Figure 6.1.1 shows the percentage of learners who were over-age for their grade. Given that learners were only asked for their age in years, for the purpose of this analysis, a learner was defined as over-age if they were:

- 8 years or older when surveyed early in Grade 2 (“Grade 1”);
- 9 years or older when surveyed early in Grade 3 (“Grade 2”);
- 10 years or older when surveyed early in Grade 4 (“Grade 3”); and
- 11 years or older when surveyed early in Grade 5 (“Grade 4”).

In every grade, the proportion of boys who were over-age was higher than that of girls, and the percentage increased steadily from one grade to the next. This pattern is consistent with the well-documented trend of higher repetition rates among boys relative to girls.

Figure 6.1.1: Over-aged learners by grade and gender



Note: Data are weighted to represent population characteristics

Sampled learners by province

Table 6.1.3 presents the number of learners sampled across provinces. In general, just under 600 learners per grade were sampled in each province, with two notable exceptions — Limpopo and Mpumalanga — where substantially larger samples were drawn. This was necessary because certain languages are predominantly spoken within those provinces. For example, the entire Tshivenda sample had to be drawn from Limpopo, while the entire Siswati sample was drawn from Mpumalanga.

The sample design therefore employed stratification to ensure that adequate numbers of schools and learners were included for each province and language group, allowing for the generation of precise, disaggregated statistics. When calculating national-level statistics, the sample was re-weighted to reflect the underlying population proportions.

Table 6.1.4 shows the weighted share of the national population represented by the sample in each province. This follows the familiar demographic pattern, with provinces such as the Northern Cape contributing relatively little to the national totals because of their smaller populations, while KwaZulu-Natal and Gauteng contribute substantially more due to their large populations.

Table 6.1.3: Number of learners in the sample by province and grade

	Grade 1	Grade 2	Grade 3	Grade 4	Total
Eastern Cape	564	575	579	567	2285
Free State	588	579	594	587	2348
Gauteng	560	560	581	555	2256
Limpopo	1493	1493	1480	1419	5885
Mpumalanga	1442	1448	1422	1425	5737
North West	585	587	579	589	2340
Western Cape	586	574	581	574	2315
KwaZulu-Natal	581	583	589	579	2332
Northern Cape	588	588	579	585	2340
Total	6987	6987	6984	6880	27838

Table 6.1.4: Percentage of the population represented by the sample by province and grade

	Grade 1	Grade 2	Grade 3	Grade 4
Eastern Cape	12.4	12.5	12.5	12.5
Free State	5.6	5.6	5.7	5.5
Gauteng	18.5	18.8	18.6	18.5
Limpopo	13.3	13.1	13.2	13.2
Mpumalanga	8.7	8.6	8.5	8.7
North West	7.0	6.8	6.8	6.8
Western Cape	10.9	11.0	11.1	11.0
KwaZulu-Natal	20.9	20.9	21.0	21.2
Northern Cape	2.7	2.7	2.8	2.7
Total	100	100	100	100

Language of assessment

Table 6.1.5 presents the number of learners sampled by language of assessment. The assessment language for each school was obtained from DBE administrative data, which records the Language of Learning and Teaching (LoLT) used in each school. Relatively similar numbers of learners were sampled for each language, with the largest number assessed in English. This reflects the fact that English is used as a LoLT across many provinces, resulting in its inclusion in a significant proportion of sampled schools.

Table 6.1.6 shows the weighted sample by language of assessment, illustrating the share of the national population represented by each language group. English accounts for the largest share, consistent with the reality that approximately 30% of children in the Foundation Phase are taught through English as the LoLT. Learners assessed in isiZulu and isiXhosa represent the next largest language groups, while isiNdebele, Tshivenda, and SiSwati account for the smallest shares. This pattern reflects the relative size of the linguistic populations across South Africa.

Table 6.1.5: Number of learners in the sample by assessment language

	Grade 1	Grade 2	Grade 3	Grade 4	Total
English	782	775	777	772	3106
Afrikaans	676	670	658	671	2675
Tshivenda	589	588	586	569	2332
Xitsonga	580	583	591	554	2308
isiNdebele	586	584	581	565	2316
isiZulu	649	662	669	659	2639
isiXhosa	659	675	680	662	2676
SiSwati	578	579	553	586	2296
Sepedi	582	585	579	547	2293
Setswana	718	712	717	714	2861
Sesotho	588	574	593	581	2336
Total	6987	6987	6984	6880	27838

Table 6.1.6: Percentage of the population represented by the sample by assessment language

	Grade 1	Grade 2	Grade 3	Grade 4
English	30.3	30.3	30.4	30.4
Afrikaans	8.5	8.5	8.7	8.5
Tshivenda	2.1	2.0	2.1	2.1
Xitsonga	3.2	3.2	3.2	3.2
isiNdebele	0.7	0.7	0.7	0.7
isiZulu	18.4	18.4	18.4	18.7
isiXhosa	12.6	12.7	12.8	12.8
SiSwati	2.4	2.4	2.4	2.4
Sepedi	9.6	9.3	9.4	9.4
Setswana	8.0	8.2	7.8	7.8
Sesotho	4.3	4.3	4.2	4.2
Total	100	100	100	100

Sample by Learner Home Language

Table 6.1.7 presents the sample disaggregated by the learner's home language, which in approximately 87% of cases was the same as the Language of Learning and Teaching (LoLT). The main exception is English. A total of 3,106 learners were assessed in English, but only 1,263 of these learners reported English as their home language.

This pattern reflects the situation in many urban and middle-class contexts, where children's home language is not English, but they attend schools where English is used as the LoLT and taught as the home language literacy subject. In all other languages, most learners reported a home language that matched the language of assessment. While English was the most common LoLT (about 30%), it accounts for only about 10% of learners by home language. The most spoken home language among South African children is isiZulu, followed by isiXhosa, while isiNdebele, Tshivenda, and SiSwati are the least commonly spoken home languages.

Table 6.1.7: Number of learners in the sample by the learner's home language

	Grade 1	Grade 2	Grade 3	Grade 4	Total
English	371	339	282	271	1263
Afrikaans	692	677	680	714	2763
Tshivenda	586	582	582	569	2319
Xitsonga	580	604	605	580	2369
IsiNdebele	558	558	573	559	2248
IsiZulu	747	751	783	762	3043
IsiXhosa	740	779	818	785	3122
SiSwati	535	574	542	569	2220
Sepedi	651	632	633	601	2517
Setswana	685	708	710	703	2806
Sesotho	663	682	703	710	2758
No response	179	101	73	57	410
Total	6987	6987	6984	6880	27838

Table 6.1.8: Percentage of the population represented by the sample by the learner's home language

	Grade 1	Grade 2	Grade 3	Grade 4
English	12.2	10.8	9.4	9.2
Afrikaans	9.7	9.7	9.4	10.3
Tshivenda	2.6	2.4	2.5	2.4
Xitsonga	3.9	4.1	4.2	4.6
IsiNdebele	1.0	1.0	1.2	1.1
IsiZulu	24.6	24.1	25.0	25.0
IsiXhosa	15.8	16.4	17.0	16.7
SiSwati	2.7	2.9	3.1	2.8
Sepedi	11.9	11.2	11.8	11.3
Setswana	8.5	9.5	9.0	8.8
Sesotho	7.1	8.0	7.5	7.9
Total	100	100	100	100

Sample by school poverty quintile

Schools in South Africa are categorised into five school poverty quintiles, which reflect the relative poverty levels of the communities they serve. These quintiles are not equally sized in terms of the number of schools or learners. Quintiles 1, 2, and 3 each account for slightly more than 20% of schools and learners, whereas Quintiles 4 and 5 each account for less than 20%.

The FUNS sample was not stratified by school poverty quintile. Consequently, the distribution of schools across quintiles in the sample was the result of random selection, after stratification by language and province.

Table 6.1.9 presents the number of learners in the sample by school poverty quintile. A substantially larger number of children were sampled from Quintile 1–3 schools, which are non-fee-paying schools serving poorer communities, compared with those from Quintile 4 and 5 schools. The relative under-sampling of Quintile 4 and 5 schools reflects the need to ensure sufficient sample sizes within each language, particularly for languages such as Tshivenda, Xitsonga, and Siswati, which are spoken by smaller populations and where most schools fall within Quintiles 1–3. Table 6.1.10 shows the weighted population distribution by school poverty quintile after applying sampling weights.

Table 6.1.9: Number of learners in the sample by school poverty quintile

	Grade 1	Grade 2	Grade 3	Grade 4	Total
Quintile 1	1653	1656	1661	1666	6636
Quintile 2	2151	2153	2147	2102	8553
Quintile 3	1920	1909	1910	1841	7580
Quintile 4	627	638	639	637	2541
Quintile 5	576	573	567	575	2291
No Quintile info	60	58	60	59	237
Total	6987	6987	6984	6880	27838

Table 6.1.10: Percentage of the population represented by the sample by school poverty quintile

	Grade 1	Grade 2	Grade 3	Grade 4
Quintile 1	23.0	22.9	22.6	23.3
Quintile 2	23.0	23.1	22.9	22.9
Quintile 3	22.7	22.5	22.6	22.3
Quintile 4	12.6	12.7	13.3	12.7
Quintile 5	18.5	18.5	18.2	18.5
No Quintile info	0.3	0.3	0.4	0.3
Total	100	100	100	100

Table 6.1.11 shows the percentage of learners in no-fee schools by language and by province. Gauteng and the Western Cape stand out as having the lowest percentages of learners in no-fee schools, reflecting their higher socio-economic status relative to other provinces. In contrast, 96% of learners in Limpopo were in no-fee schools. Similarly, whereas 100% of Tshivenda learners were in no-fee schools, only 18% of learners assessed in English were in no-fee schools. This demonstrates the importance of noting the socio-economic factors underlying differences in reading achievement across languages and provinces. To a large extent, inequalities in educational outcomes reflect underlying socio-economic disparities rather than purely linguistic differences or the quality of provincial administration.

Table 6.1.11: Percentage of learners in no-fee schools (Quintile 1-3) by language and province

Language	% No-fee		Province	% No-fee
English	18%		Eastern Cape	94%
Afrikaans	56%		Free State	87%
Tshivenda	100%		Gauteng	28%
Xitsonga	97%		Limpopo	96%
IsiNdebele	84%		Mpumalanga	68%
IsiZulu	94%		North West	86%
IsiXhosa	99%		Western Cape	45%
SiSwati	81%		KwaZulu-Natal	73%
Sepedi	92%		Northern Cape	75%
Setswana	99%			
Sesotho	95%			
Total	68%		Total	68%



Summary statistics of assessment outcomes

This section presents descriptive statistics for the various assessment tasks administered through FUNS. Three tables are included, corresponding to three main subsets of the assessments.

Table 6.2.1 presents summary statistics for all the home-language tasks administered through the individually conducted oral assessments. Table 6.2.2 presents summary statistics for the written home-language assessment, which was administered in a group setting. Table 6.2.3 presents summary statistics for the English First Additional Language (EFAL) tasks, which were administered as part of the individual oral assessment.

In each table, the number of learners with valid responses is reported, along with the mean, minimum, and maximum scores. In addition, performance at several key points in the distribution is shown—specifically the 10th, 25th, 50th, 75th, and 90th percentiles of achievement. Lastly, the final column shows the percentage of learners scoring zero on each task. Note that all these summary statistics are weighted to represent the underlying population rather than the unweighted sample.

Turning to the results presented in Table 6.2.1, rapid object naming was administered only to Grade 1 learners. This task is not regarded as a reading outcome but rather as a predictor of learning to read. It was therefore included for its potential analytical value in relation to other outcomes. Almost all children were able to name at least some objects. Even at the 10th percentile of achievement, learners named 24 objects correctly per minute, with a mean of 41.

The table illustrates a clear progression in difficulty across the skills assessed. In letter-sound recognition, most Grade 1 learners to recognise some letters correctly, achieving a mean score of 28 letters per minute. However, these learners struggled with more advanced skills such as word-building and, particularly, the two comprehension tasks. More than half of the Grade 1 learners scored zero on the comprehension tasks.

Performance improved steadily across the grades. For example, in ORF 2, which was the grade-level oral reading fluency task—the mean number of words read correctly per minute increased from 12 in Grade 1 to 27 in Grade 2, 41 in Grade 3, and 48 in Grade 4. A similar progression is seen for ORF 1, which was the same passage that was administered to the grade below. For example, what we call “Passage C” was the ORF 2 task for Grade 2 and the ORF 1 task for Grade 3. Mean comprehension scores also rose substantially from Grade 1 through Grade 4. In fact, the growth in skills reflected in Table 6.2.1 somewhat understates actual learning progress, since the passages used became progressively more difficult from one grade to the next. A later section of this report provides a more detailed analysis of learning gains using common items across grades.



Table 6.2.1: Summary statistics of Home Language orally administered assessments

	count	mean	min	p10	p25	p50	p75	p90	max	percent zero
Grade 1										
Object Naming	6987	41	0	24	33	42	51	60	112	0.7
Letter sound recognition	6985	28	0	0	8	26	44	56	112	10.2
HL Words	6984	11	0	0	0	6	16	28	225	28.5
HL ORF1 (Passage A)	6978	11	0	0	0	4	16	36	66	40.5
HL ORF2 (Passage B)	6978	12	0	0	0	3	18	38	76	42.5
HL Comprehension1	6987	18	0	0	0	0	36	64	100	56.9
HL Comprehension2	6987	15	0	0	0	0	27	55	100	60.0
Grade 2										
Object Naming	0	.	.	.	.	.	.	.	.	.
Letter sound recognition	6987	34	0	2	15	35	51	62	225	9.4
HL Words	6985	17	0	0	3	14	24	38	240	18.0
HL ORF1 (Passage A)	6972	25	0	0	5	21	42	56	66	18.9
HL ORF2 (Passage C)	6973	27	0	0	5	19	41	69	109	20.1
HL Comprehension1	6987	41	0	0	0	45	73	82	100	27.0
HL Comprehension2	6987	36	0	0	0	33	58	83	100	28.9
Grade 3										
Object Naming	0	.	.	.	.	.	.	.	.	.
Letter sound recognition	6983	34	0	2	15	35	51	64	151	9.4
HL Words	6984	19	0	0	6	16	26	45	107	13.8
HL ORF1 (Passage C)	6979	40	0	0	14	34	63	92	109	12.6
HL ORF2 (Passage D)	6971	41	0	0	13	35	58	96	234	14.6
HL Comprehension1	6984	48	0	0	17	58	75	83	100	17.8
HL Comprehension2	6984	43	0	0	17	42	67	83	100	18.1
Grade 4										
Object Naming	0	.	.	.	.	.	.	.	.	.
Letter sound recognition	0	.	.	.	.	.	.	.	.	.
HL Words	6876	24	0	0	10	19	32	57	219	10.1
HL ORF1 (Passage D)	6869	52	0	0	24	45	77	110	234	10.6
HL ORF2 (Passage E)	6868	48	0	0	21	40	71	99	248	11.4
HL Comprehension1	6880	51	0	0	25	54	75	92	100	12.9
HL Comprehension2	6880	44	0	0	25	42	67	83	100	14.3

Table 6.2.2 presents descriptive statistics for the two sections of the group-based written assessment, which was administered in the home language only. Learners were first given 30 minutes to complete a written comprehension task, followed by an additional 10 minutes to complete an assessment of semantic awareness, which tested their knowledge of synonyms and antonyms. The written assessment was administered only to Grade 3 and Grade 4 learners.

It is important to note that the semantic awareness assessment was not administered to English and Afrikaans learners. This item was specifically introduced as part of new exploratory work aimed at deepening understanding of how skills such as morphological awareness and semantic awareness contribute to reading development in the African languages.

For both tasks, outcomes are reported as percentage scores. Performance in the written comprehension assessment was relatively weak, with mean scores of 32% for Grade 3 and 42% for Grade 4 learners. However, it is encouraging that there were not large floor effects: More than 90% of learners were able to answer at least one item correctly.

Performance in the semantic awareness task was relatively strong compared to other reading-related skills, with mean scores of 57% in Grade 3 and 66% in Grade 4. Considering Tables 6.2.1 and 6.2.2 together, it appears that learners possess relatively good semantic awareness—an important component of oral language—when compared to their decoding and reading comprehension skills, which seem to lag further behind.

Table 6.2.2: Summary statistics of Home Language written assessments

	count	mean	min	p10	p25	p50	p75	p90	max	percent zero
Grade 3										
Written comprehension	6674	32	0	6	12	25	50	75	100	10.0
Semantics	5341	57	0	10	30	60	90	100	100	8.1
Grade 4										
Written comprehension	6626	42	0	11	16	42	63	84	100	3.2
Semantics	5263	66	0	20	40	70	100	100	100	4.0

Table 6.2.3 presents summary statistics for the English First Additional Language (EFAL) orally administered assessment tasks. No EFAL tasks were administered to Grade 1 learners. For Grade 2 learners, only isolated word reading in EFAL was assessed. For Grade 3 learners, both isolated word reading and one oral reading fluency passage were administered, followed by an oral comprehension task based on the same passage. Grade 4 learners completed isolated word reading and two oral reading fluency passages, each followed by a corresponding oral comprehension assessment.

It should also be noted that learners who were assessed in English as their home language were additionally given the EFAL tasks. A later section of this report will explore their performance in more detail, comparing their home-language and EFAL outcomes.

The results in Table 6.2.3 indicate that learners generally found EFAL comprehension more difficult than their home language comprehension tasks. For example, mean EFAL comprehension scores were consistently lower than those obtained for home language comprehension tasks, suggesting that reading and understanding text in a second language poses an additional challenge for most learners.

Table 6.2.3: Summary statistics of EFAL orally administered assessments

	count	mean	min	p10	p25	p50	p75	p90	max	percent zero
Grade 2										
EFAL Words	6982	19	0	0	1	12	31	48	116	24.6
EFAL ORF1	0	.	.	.	.	.	.	.	.	.
EFAL ORF2	0	.	.	.	.	.	.	.	.	.
EFAL Comprehension1	0	.	.	.	.	.	.	.	.	.
EFAL Comprehension2	0	.	.	.	.	.	.	.	.	.
Grade 3										
EFAL Words	6977	26	0	0	4	20	44	63	129	20.5
EFAL ORF1	6968	47	0	0	8	44	74	101	211	19.3
EFAL ORF2	0	.	.	.	.	.	.	.	.	.
EFAL Comprehension1	6984	22	0	0	0	12	38	62	100	47.7
EFAL Comprehension2	0	.	.	.	.	.	.	.	.	.
Grade 4										
EFAL Words	6876	37	0	0	12	37	56	73	144	12.6
EFAL ORF1	6866	63	0	0	31	65	91	114	211	13.5
EFAL ORF2	6867	54	0	0	24	53	80	104	306	14.9
EFAL Comprehension1	6880	30	0	0	0	25	50	75	100	32.1
EFAL Comprehension2	6880	20	0	0	0	10	30	60	100	42.3

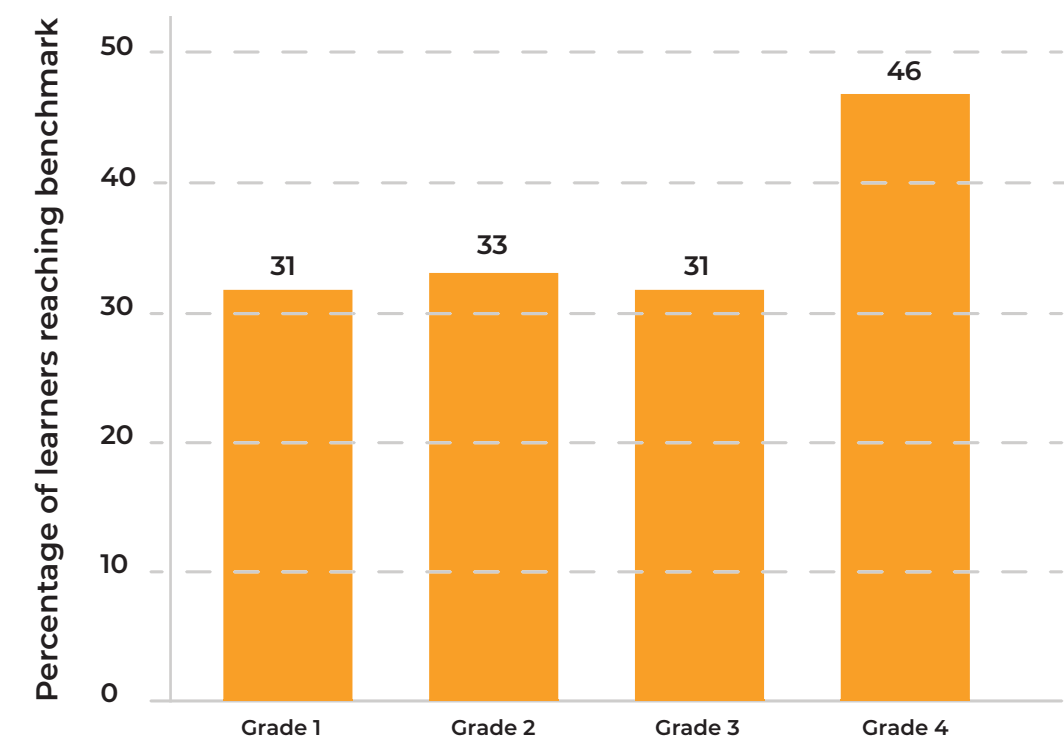
Attainment of reading benchmarks

This section presents the overall percentages of learners in Grades 1 to 4 who achieved the reading benchmarks in their home language as well as in English as a First Additional Language (EFAL). The results are disaggregated by language of assessment, by province, and by school poverty quintile. A separate section addresses differences by gender.

Reaching benchmarks: Overall national results

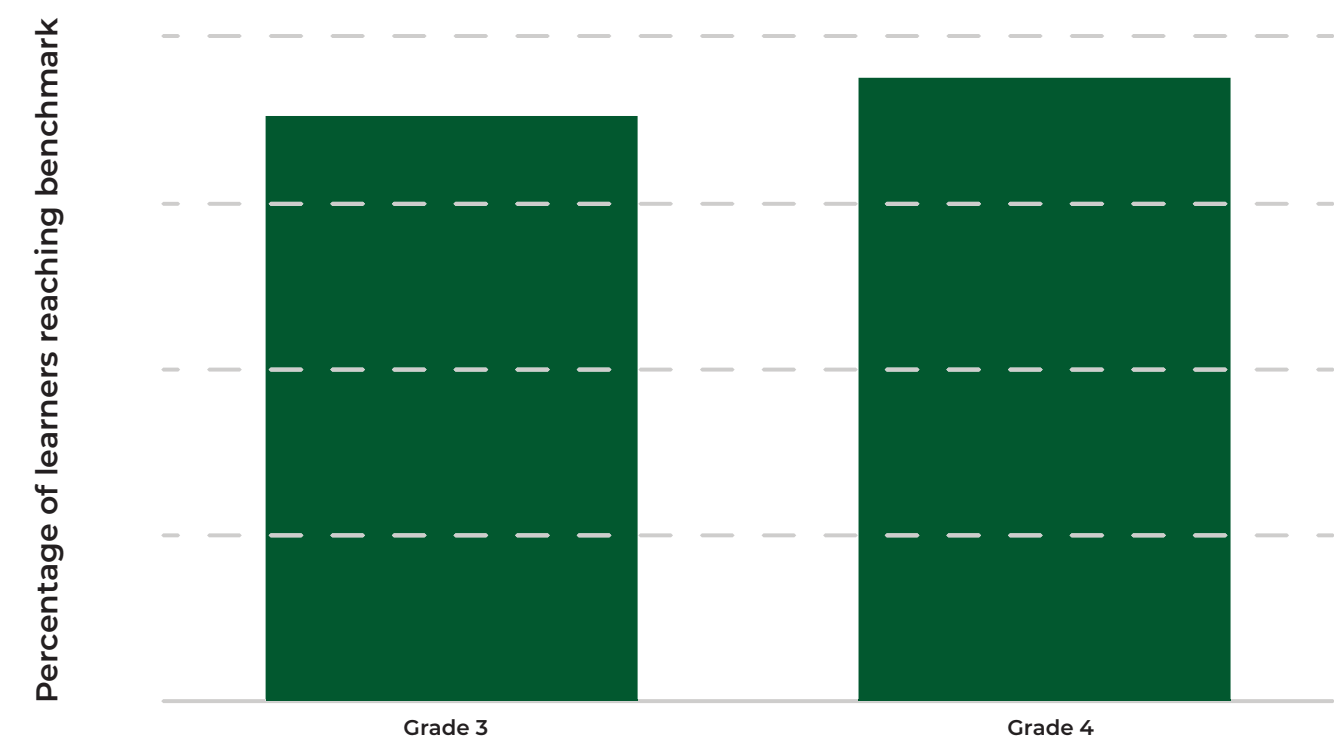
Figure 6.3.1 provides a summary of the overall national results for each grade. In Grade 1, only 31% of learners achieved the Home Language Reading Benchmark, defined as 40 correct letter sounds per minute across all languages. In Grades 2 and 3, just over 30% of learners met their respective Home Language Reading Benchmarks, which vary by language group and are based on oral reading fluency measured in words correct per minute. By Grade 4, only 46% of learners had reached the Grade 3 Home Language Benchmark — a modest improvement from the previous year but still reflecting substantial backlogs. These results point to a critical concern: fewer than half of children meet the reading benchmark by the time they transition from their home language to English as the language of instruction.

Figure 6.3.1: Percentage of learners reaching Home Language Benchmarks



Performance in EFAL (Figure 6.3.2) reading is similarly low. Only Grades 3 and 4 were assessed in EFAL through FUNS, with 35% of Grade 3 learners and 38% of Grade 4 learners achieving the benchmark of 50 and 70 correct words per minute respectively. Taken together, these findings show that by the time children enter Grade 4 and face the shift from learning in their home language to learning through English, the majority have not yet developed sufficient reading skills in either language. This motivates the need to strengthen and extend mother-tongue-based bilingual education beyond the Foundation Phase, as the DBE is currently pursuing.

Figure 6.3.2: Percentage of learners reaching EFAL Benchmarks



Home Language Benchmark attainment by language

Table 6.3.1 shows the percentage of learners across each grade and language who reached the Home Language Reading Benchmarks. In Grade 1, learners assessed in English were most likely to meet the benchmark of 40 correct letter sounds per minute, followed by learners assessed in Afrikaans and then isiXhosa. Across the grades, learners assessed in English generally performed the highest in terms of reaching the benchmark. Although English is often not the learners' home language, this advantage most likely reflects their higher average socio-economic status.

There are also notable trends across grades for specific languages. For example, relatively high proportions of isiXhosa-speaking children achieve the Grade 1 benchmark, suggesting that letter-sound recognition is fairly well taught in the Eastern Cape. However, this language group performs worse in Grade 3 and Grade 4, against the Grade 3 benchmarks. This may reflect that letter sounds is a constrained skill and can be effectively improved through rote drill, but blending and other more complex skills require a different approach. In contrast, isiZulu-speaking children are the least likely to reach the Grade 1 benchmark in letter-sound knowledge but show substantial improvement relative to their isiXhosa counterparts by Grades 3 and 4.

Figures 6.3.3, to 6.3.6 present the same information contained in Table 6.3.1 but in separate graphs for each grade. The bar charts in these figures not only show the percentage of learners in each language achieving Home Language Benchmarks but also depict a 95% confidence interval around each estimate. This indicates the precision of the estimates and should inform interpretation when making comparisons across languages. For example, Figure 6.3.3 shows that although a larger percentage of Afrikaans-speaking children appear to have achieved the Grade 1 benchmark compared to English-speaking children, the confidence intervals overlap, indicating that we cannot be 95% certain that Afrikaans-speaking children in the population actually outperform their English-speaking peers. By contrast, the difference in performance between isiXhosa and Siswati learners can be regarded as statistically significant at the 95% confidence level, since the confidence intervals do not overlap.

One language group that consistently performed relatively well — especially given the deep rural contexts in which it is predominantly spoken — is Tshivenda. Not only did comparatively high percentages of children reach the fluency benchmarks in Tshivenda, but, as later sections will show, this group also performed relatively well on comprehension.

Table 6.3.1: Percentage of learners reaching HL benchmarks by language and grade

	Grade 1	Grade 2	Grade 3	Grade 4
English	40	42	48	64
Afrikaans	47	32	26	49
Tshivenda	28	44	33	45
Xitsonga	25	22	16	31
IsiNdebele	17	33	14	36
IsiZulu	12	23	31	44
IsiXhosa	37	36	19	29
SiSwati	21	33	27	41
Sepedi	30	30	11	26
Setswana	26	26	26	45
Sesotho	36	21	18	38
Total	31	33	31	46

Figure 6.3.3: Percentage of Grade 1 learners reaching HL benchmarks by language

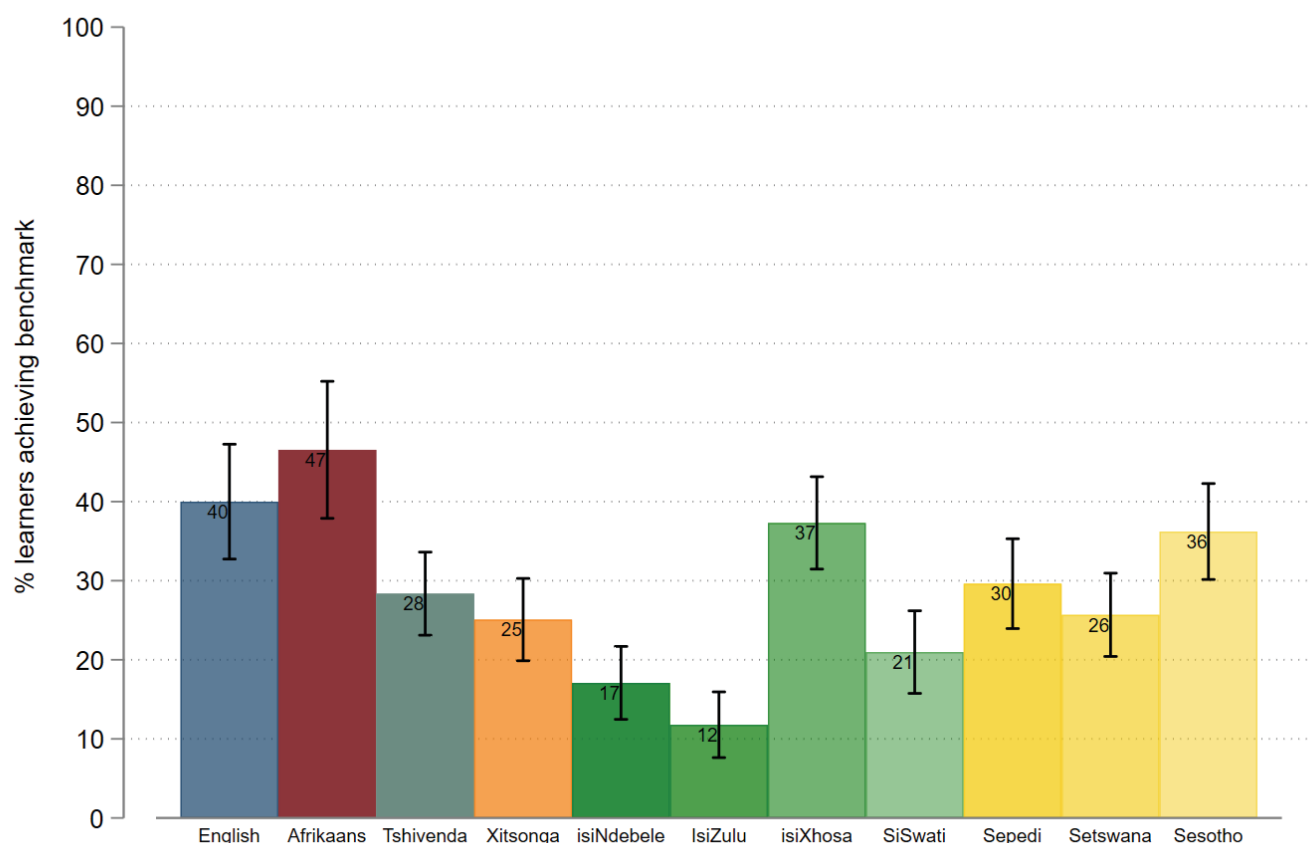


Figure 6.3.4: Percentage of Grade 2 learners reaching HL benchmarks by language

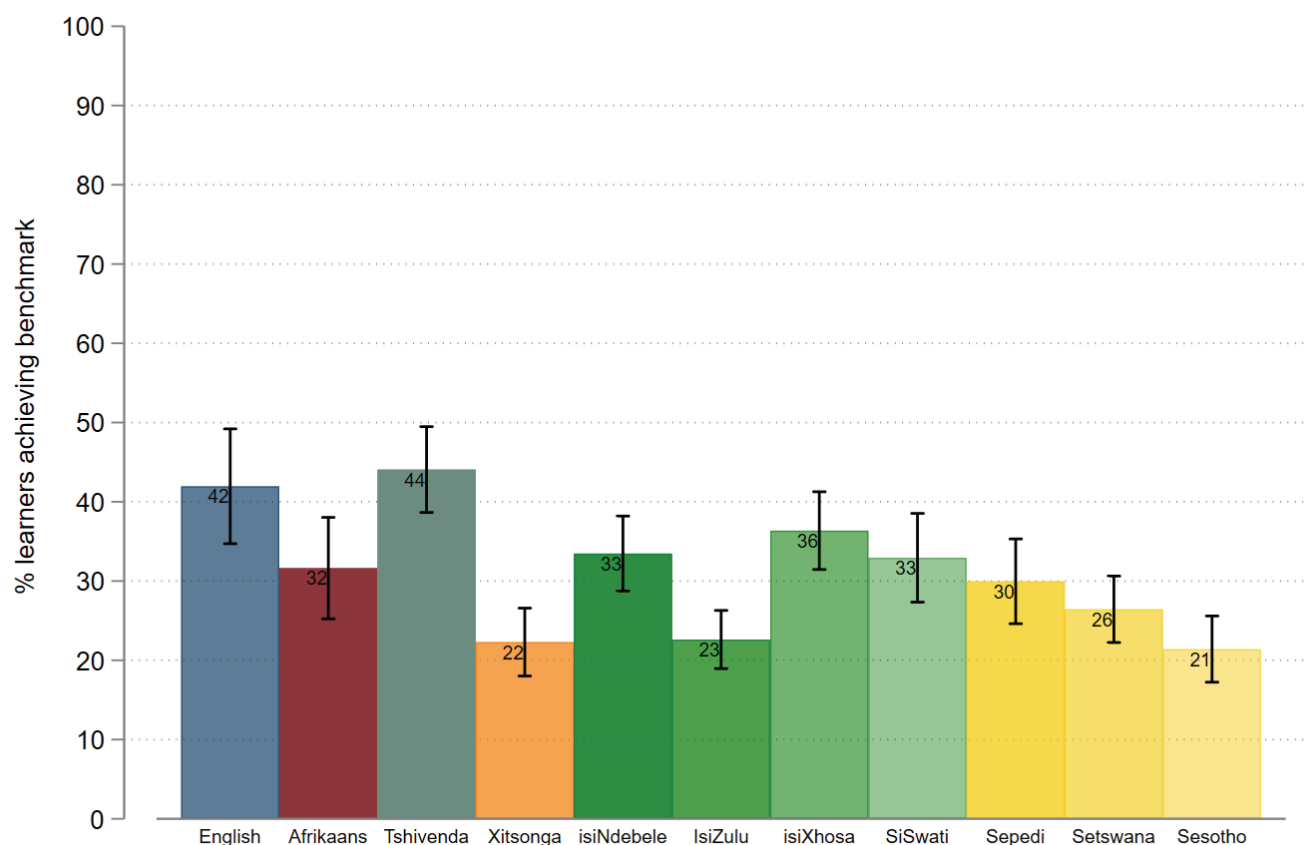


Figure 6.3.5: Percentage of Grade 3 learners reaching HL benchmarks by language

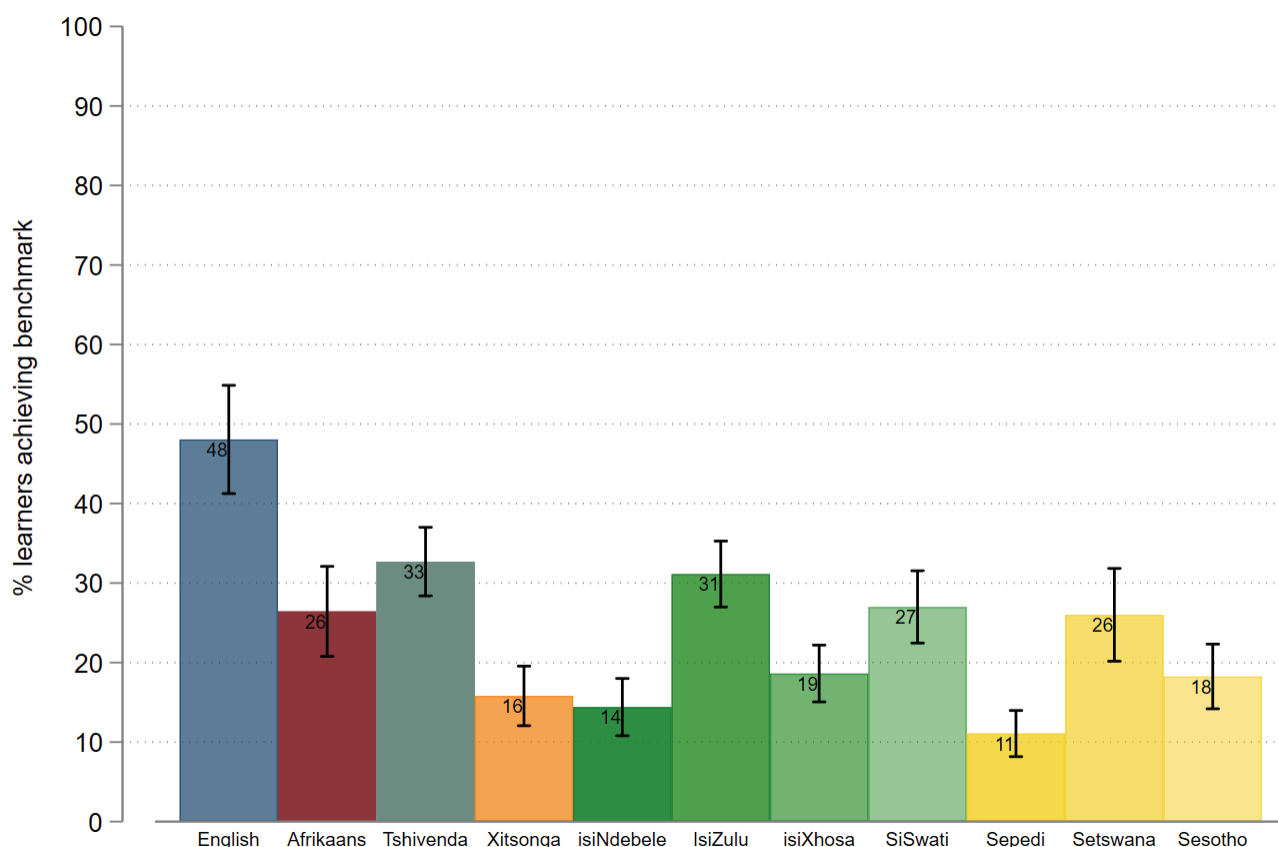
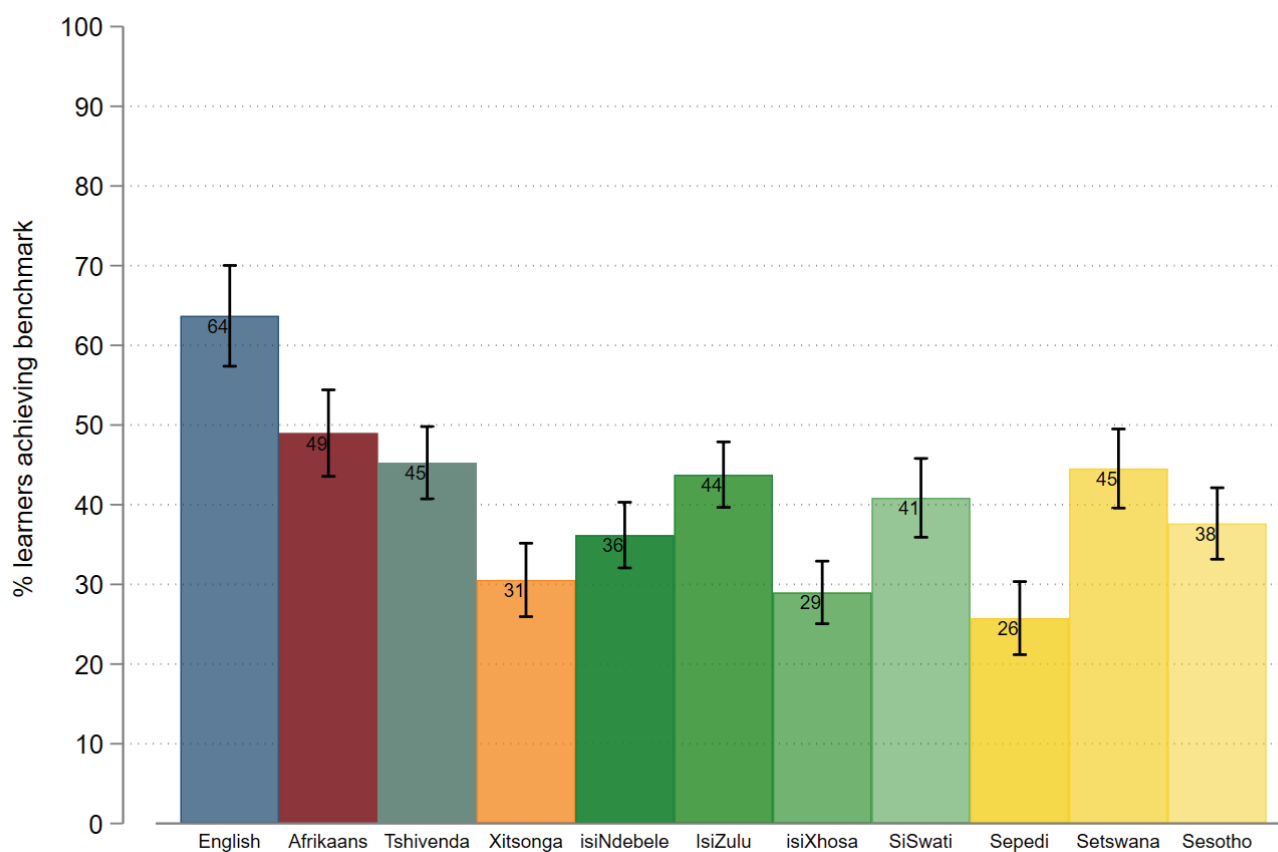


Figure 6.3.6: Percentage of Grade 4 learners reaching Grade 3 HL benchmarks by language



Home Language Benchmark attainment by province

Table 6.3.2 shows the percentage of learners across the provinces reaching their Home Language Benchmarks. For most grades, the Western Cape had the largest proportion of children meeting the benchmarks — though, as with the English- and Afrikaans-speaking groups of children, this largely reflects the province's more favourable socio-economic context.

Gauteng is another province with a higher average socio-economic status compared to other provinces in South Africa. In Grades 1, 2, and 3, Gauteng was not performing substantially better than other provinces; however, its performance appears to improve steadily with each year. By the time learners are in Grade 4, they perform at a similarly high level to those in the Western Cape. This pattern may relate to the province's linguistic diversity: children in Gauteng are more likely to attend schools and classrooms where a variety of home languages are spoken, which may pose unique challenges in the early grades but perhaps offers advantages later on.

Figures 6.3.7 to 6.3.10 present the same information contained in Table 6.3.2, but show a separate graph for each grade. As before, 95% confidence intervals are included to indicate the precision of these estimates.

Table 6.3.2: Percentage of learners reaching HL benchmarks by province and grade

	Grade 1	Grade 2	Grade 3	Grade 4
Eastern Cape	37	30	22	30
Free State	33	22	23	41
Gauteng	34	37	37	62
Limpopo	31	30	19	31
Mpumalanga	21	30	23	36
North West	30	29	25	45
Western Cape	54	49	43	60
KwaZulu-Natal	18	30	40	50
Northern Cape	37	23	27	42
Total	31	33	31	46



Figure 6.3.7: Percentage of Grade 1 learners reaching HL benchmarks by province

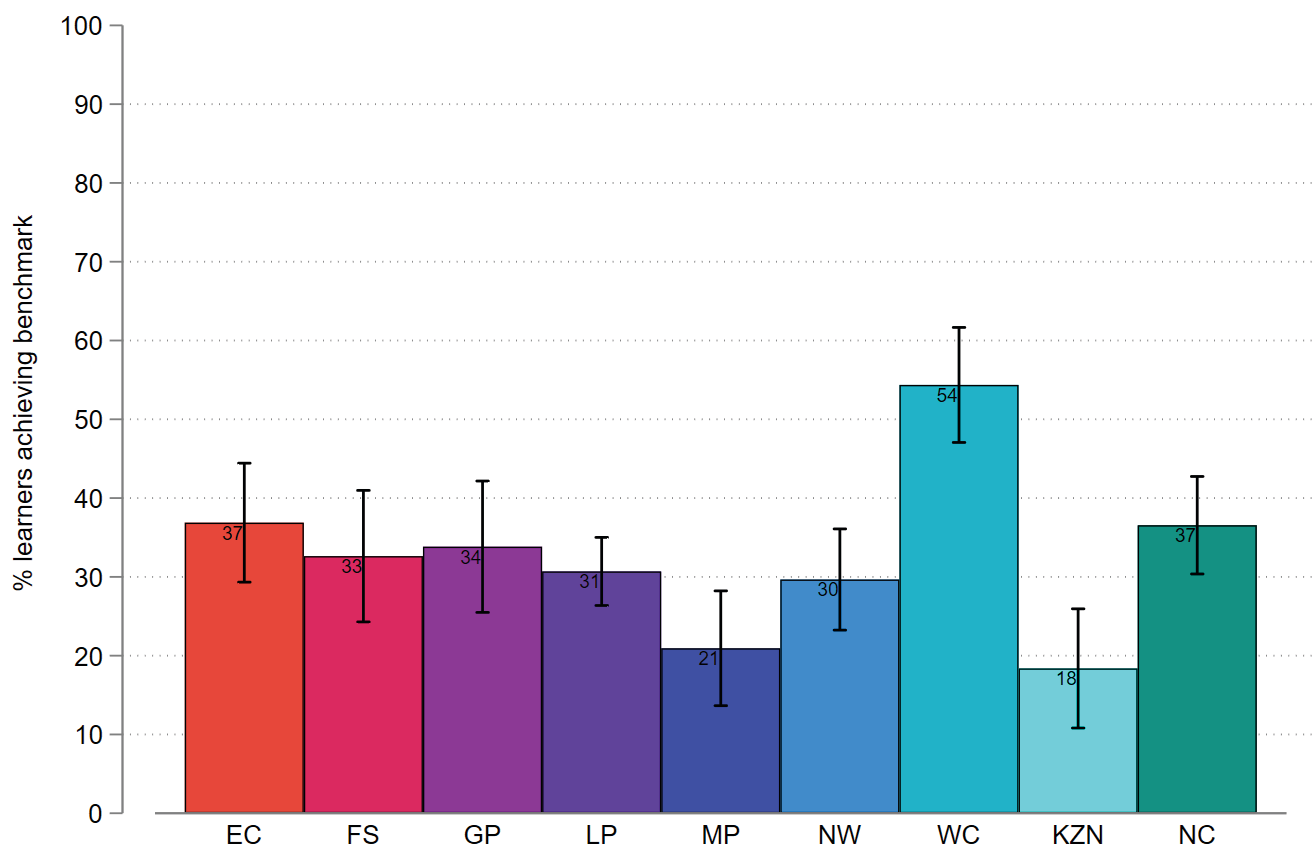


Figure 6.3.8: Percentage of Grade 2 learners reaching HL benchmarks by province

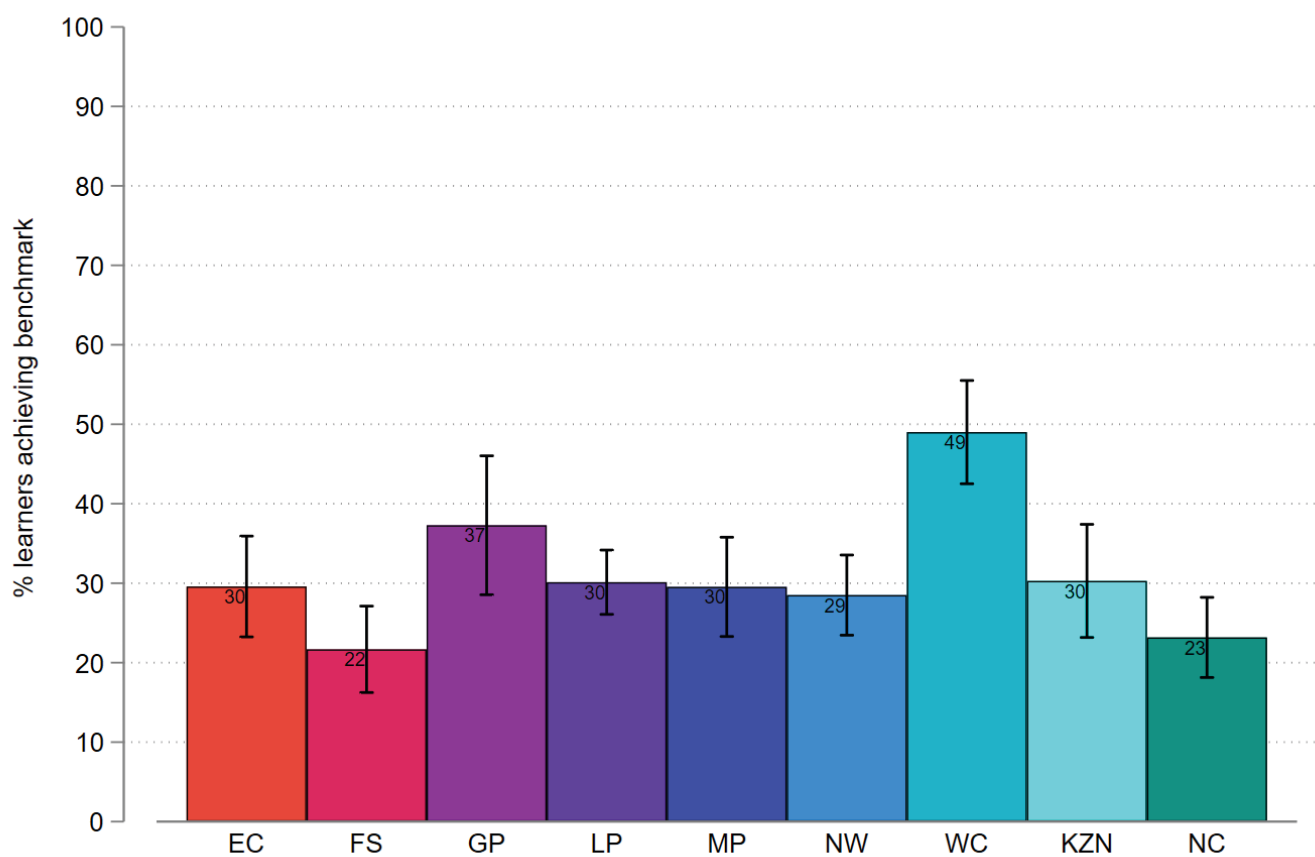


Figure 6.3.9: Percentage of Grade 3 learners reaching HL benchmarks by province

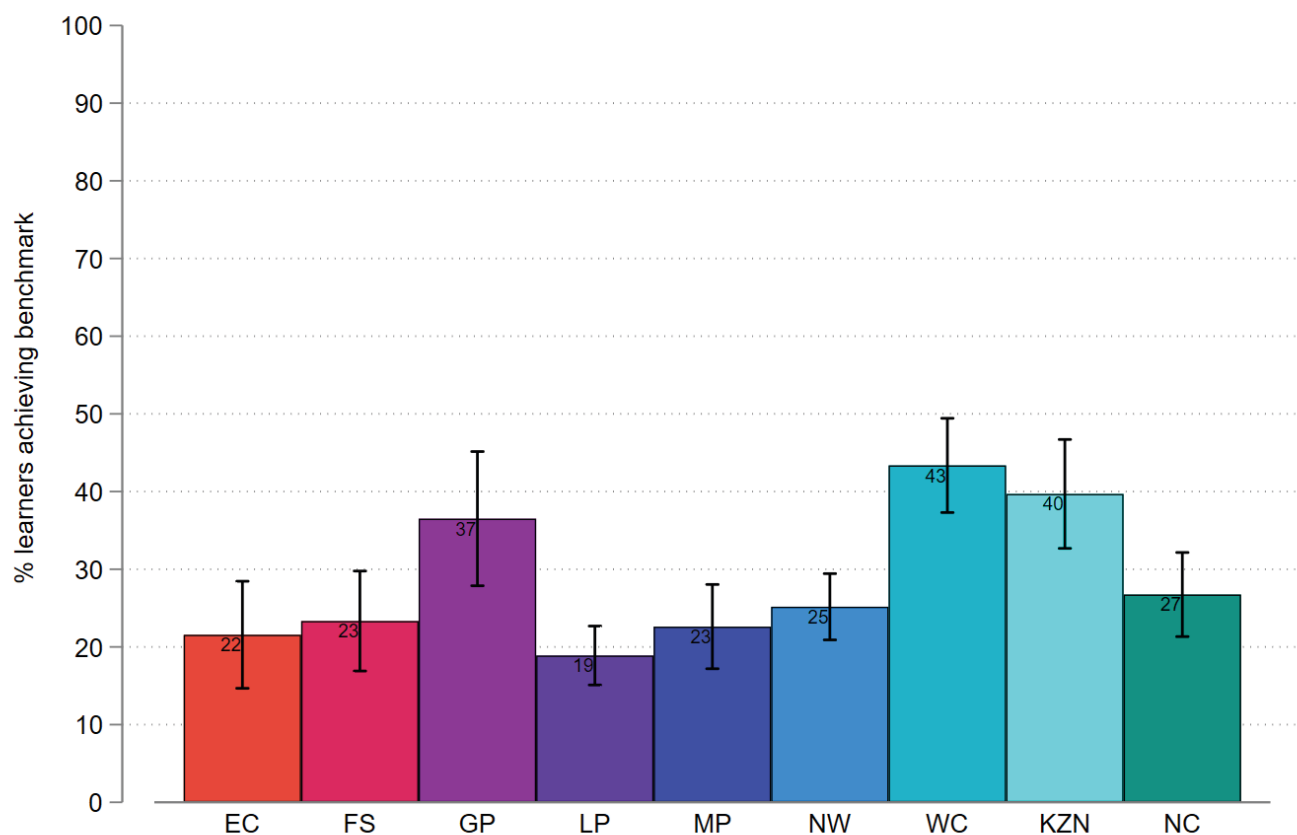
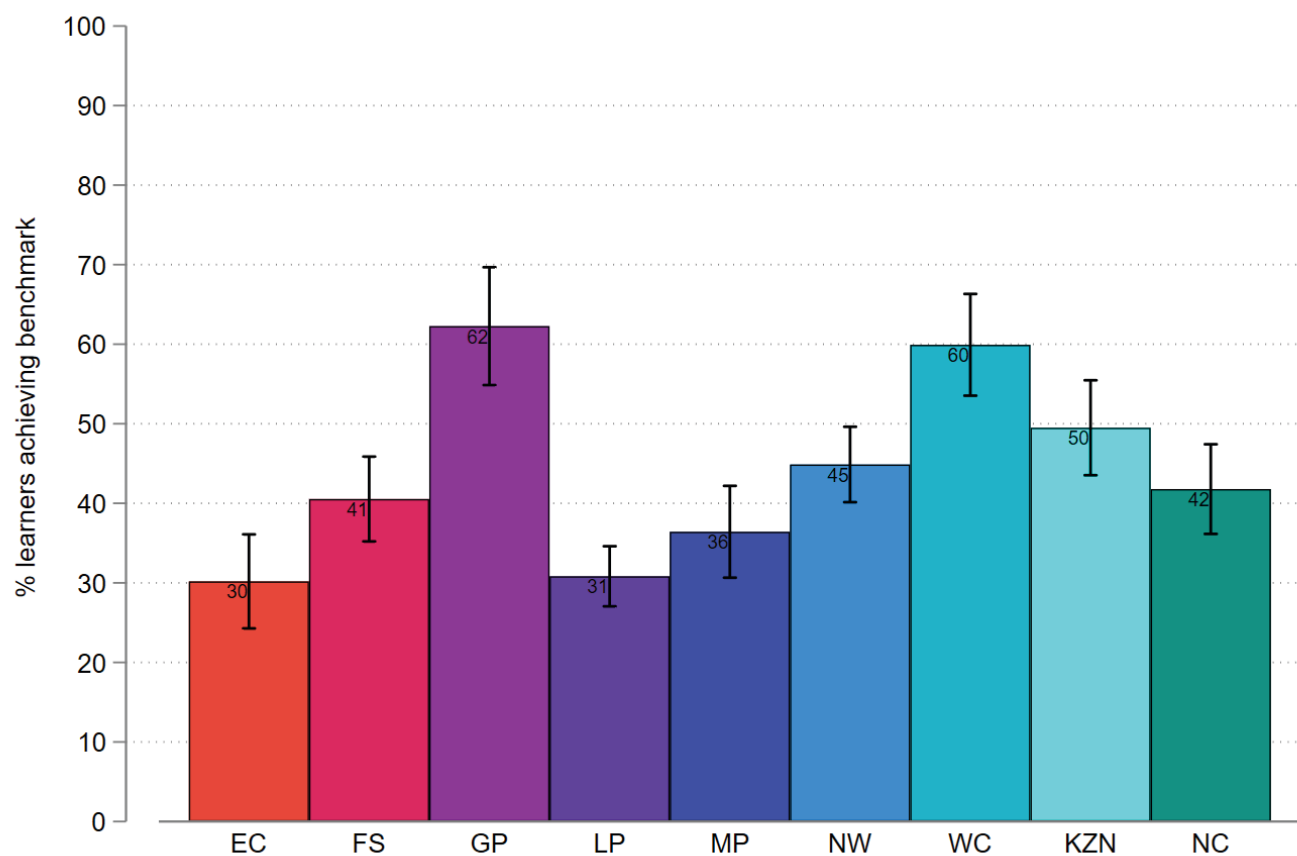


Figure 6.3.10: Percentage of Grade 4 learners reaching HL benchmarks by province



Home Language Benchmark attainment by school poverty quintile

Underlying many of the differences across language groups and provinces is socio-economic status. This is examined more explicitly in the following figures, which show the percentage of learners reaching Home Language Benchmarks by official school poverty quintile. Figure 6.3.11 indicates a consistent pattern across all grades: learners in Quintile 1 to 3 schools (no-fee schools) perform at particularly low levels, Quintile 4 schools perform noticeably better, and a significantly larger proportion of children in Quintile 5 schools reach the benchmarks.

Table 6.3.3 explores this pattern from a slightly different perspective by analysing the percentage of learners across all four grades who reached the benchmark set for Grade 2. This approach provides a clearer view of reading growth by holding the standard constant across the four grades, and also highlights the gaps by socio-economic status. For example, a larger proportion of Grade 2 children in Quintile 5 schools reached the Grade 2 benchmark compared with the proportion of Grade 3 children in Quintile 1–3 schools reaching the same benchmark. This suggests that children in Quintile 5 schools are more than a year ahead in learning compared to children in no-fee-paying schools.

Figure 6.3.11: Percentage of learners reaching HL benchmarks by grade and quintile

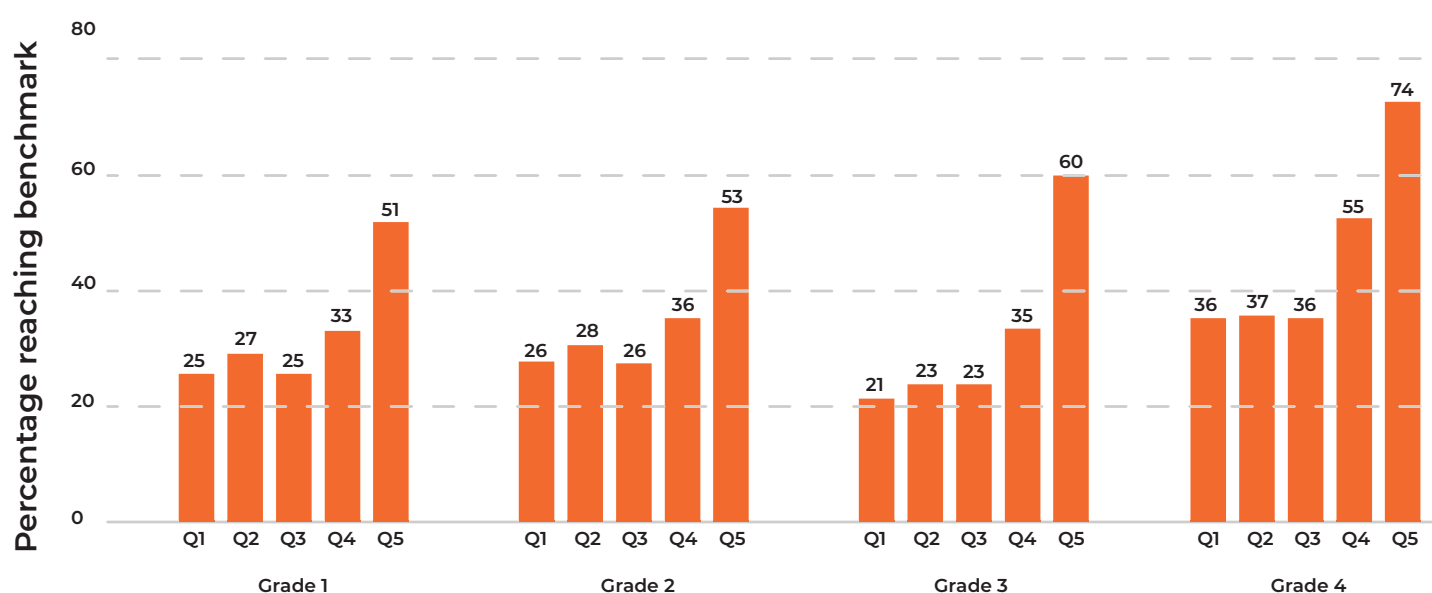


Table 6.3.3: Percentage of learners reaching Grade 2 benchmarks by grade and quintile

	Grade 1	Grade 2	Grade 3	Grade 4
Quintile 1	6%	26%	50%	63%
Quintile 2	6%	28%	51%	61%
Quintile 3	6%	26%	48%	61%
Quintile 4	10%	36%	52%	68%
Quintile 5	24%	53%	74%	81%
Total	10%	33%	54%	66%

EFAL Benchmark attainment by language

The next subsections disaggregate the percentages of children reaching the EFAL benchmarks. It is important to note that learners who take English at the Home Language level were also assessed on EFAL passages, but they have not been included in the calculations for the overall percentages reaching EFAL benchmarks. A later section will, however, present some analysis of their performance on EFAL tasks.

Table 6.3.4 shows the percentage of Grade 3 and Grade 4 children reaching EFAL benchmarks by home language. The advantage observed among Afrikaans-speaking children may partly reflect their socio-economic status as well as their greater exposure to English in the areas where they live. Otherwise, differences across language groups in EFAL performance were not consistently large.

Table 6.3.4: Percentage of learners reaching EFAL benchmarks by language and grade

	Grade 3	Grade 4
Afrikaans	43	50
Tshivenda	33	31
Xitsonga	24	25
IsiNdebele	36	43
IsiZulu	35	35
IsiXhosa	32	34
SiSwati	37	37
Sepedi	33	38
Setswana	34	42
Sesotho	36	37
Total	35	38

EFAL Benchmark attainment by province

Table 6.3.5 shows the percentage of learners reaching EFAL benchmarks by province. Interestingly, Gauteng performs the best on EFAL, even though it did not perform the best on Home Language benchmarks. As noted earlier, this may reflect the particular challenges Gauteng faces regarding Home Language instruction given its linguistic diversity, but also the relatively greater exposure to English in the province.

Table 6.3.5: Percentage of learners reaching EFAL benchmarks by province and grade

	Grade 3	Grade 4
Eastern Cape	26	32
Free State	37	37
Gauteng	52	52
Limpopo	30	33
Mpumalanga	34	34
North West	31	42
Western Cape	45	48
KwaZulu-Natal	33	34
Northern Cape	35	41
Total	35	38

EFAL Benchmark attainment by school poverty quintile

Finally, Table 6.3.6 shows the familiar pattern of significantly higher percentages of learners reaching EFAL benchmarks in Quintile 5 schools compared to Quintile 4 and, especially, Quintiles 1–3 schools.

Table 6.3.6: Percentage of learners reaching EFAL benchmarks by quintile

	Grade 3	Grade 4
Quintile 1	30	34
Quintile 2	35	35
Quintile 3	33	39
Quintile 4	44	51
Quintile 5	71	64
Total	35	38

Categories of achievement in benchmarked skills

The previous section presented the percentages of children reaching key benchmarks in letter-sound recognition and oral reading fluency. It is also possible to classify achievement into more than just two categories of reaching or not reaching a particular benchmark. In this section, we consider the percentage of learners falling into six categories, ranging from zero scores through to high achievers who exceed the benchmark. The definitions and rationale for these categories were outlined earlier; however, by way of reminder, four categories—zero scores, non-readers, pre-readers, and emerging readers—all fall below the benchmark. Learners who reach the benchmark are divided into two further categories, with “exceeds benchmark” referring to learners who have not only reached their grade-level benchmark but have also met the benchmark set for the next grade. For example, if a Grade 2 learner reaches the Grade 3 oral reading fluency benchmark, they are considered to have exceeded the benchmark.

Categories of achievement by language

Figures 6.4.1 to 6.4.4 show the percentages of children falling within each of these categories by language and for each grade. For Grade 1 learners, there is no “exceeds benchmark” category. This is because the Grade 1 benchmark is based on letter-sound recognition—specifically, 40 correct letter sounds per minute. Letter-sound recognition is a constrained skill: achieving the benchmark is important for it enables learners to readily develop word recognition skills, but once a learner reaches the benchmark, there is limited additional benefit from becoming even faster or more fluent in identifying letter sounds. Indeed, we observe a flattening-off of letter-sound recognition in Grades 2 and 3, suggesting that once the skill is acquired in Grade 1, learners must progress to higher-order skills such as word-building, fluent passage reading, and comprehension strategies.

As Figure 6.4.1 illustrates, roughly 20% of Grade 1 learners can be classified as zero scorers or non-readers, indicating that they are still particularly weak in recognising letters—a foundational decoding skill needed to begin the reading journey. A fairly large proportion of Grade 1 learners fall into the “pre-reader” category, defined as reading between six and 25 correct letter sounds per minute. although they have some letter-sound knowledge, it is not enough to facilitate word reading. Across Figures 6.4.2 to 6.4.4, learners assessed in English display the strongest distribution of achievement, with relatively large proportions not only meeting but also exceeding the benchmark. For example, 38% of Grade 3 learners assessed in English also met a higher standard of 85 words correct per minute. On the other hand, Xitsonga, Siswati and Sepedi were generally the languages with the highest percentages of learners scoring zero or falling into the non-reader category.

Figure 6.4.1: Categories of HL letter sound recognition by language – Grade 1



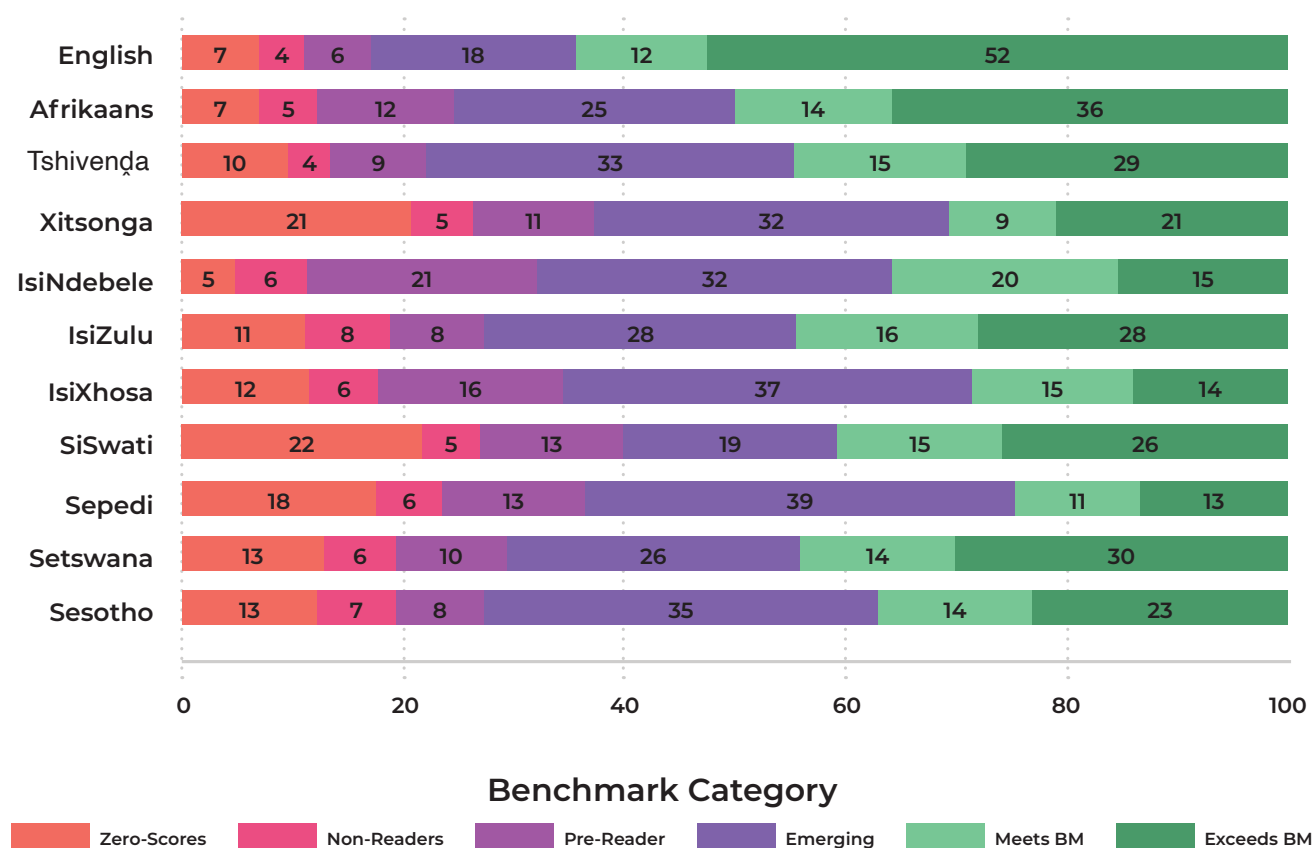
Figure 6.4.2: Categories of HL ORF achievement by language – Grade 2



Figure 6.4.3: Categories of HL ORF achievement by language – Grade 3



Figure 6.4.4: Categories of HL ORF achievement by language – Grade 4



Categories of achievement by province

Figures 6.4.5 to 6.4.8 present the categories of achievement by province. The Western Cape consistently has the lowest percentage of learners falling into the bottom two categories, followed by Gauteng. This pattern largely reflects their relative socio-economic advantage. The remaining provinces generally have higher and quite similar proportions of children in the lowest two categories, though there are some variations across grades.

Figure 6.4.5: Categories of HL letter sound recognition by province – Grade 1

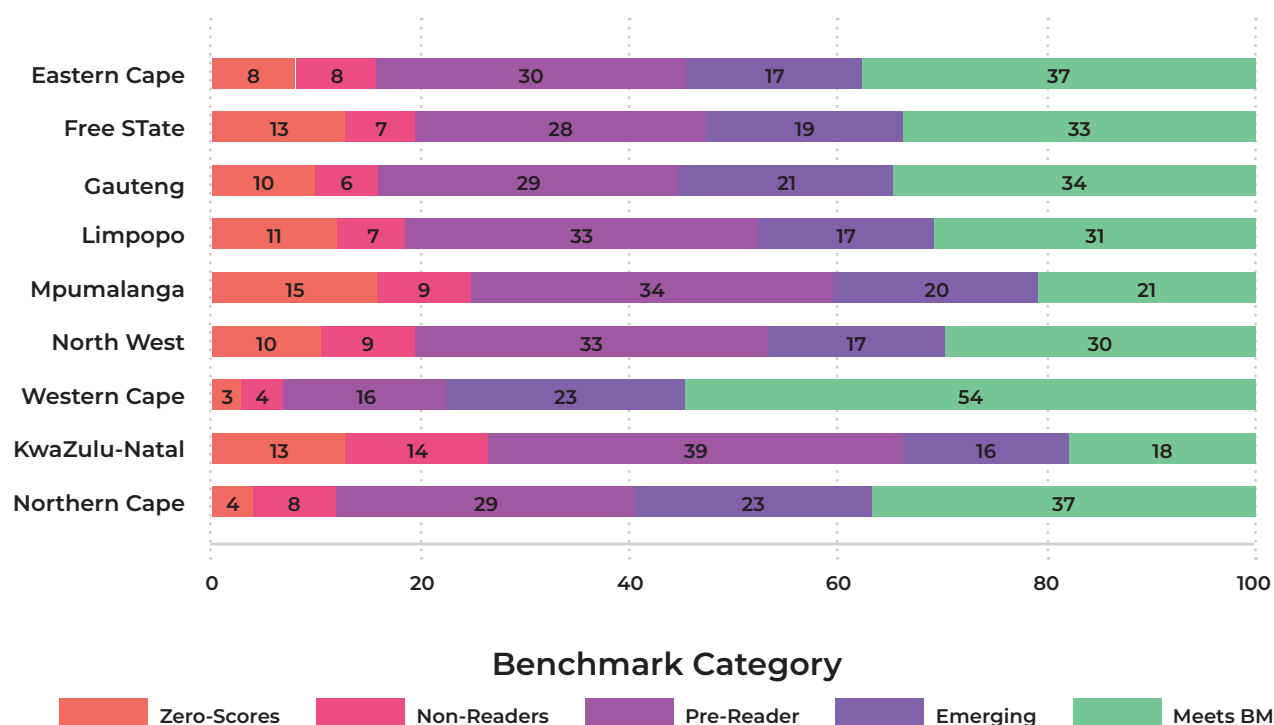


Figure 6.4.6: Categories of HL ORF achievement by province – Grade 2



Figure 6.4.7: Categories of HL ORF achievement by province – Grade 3

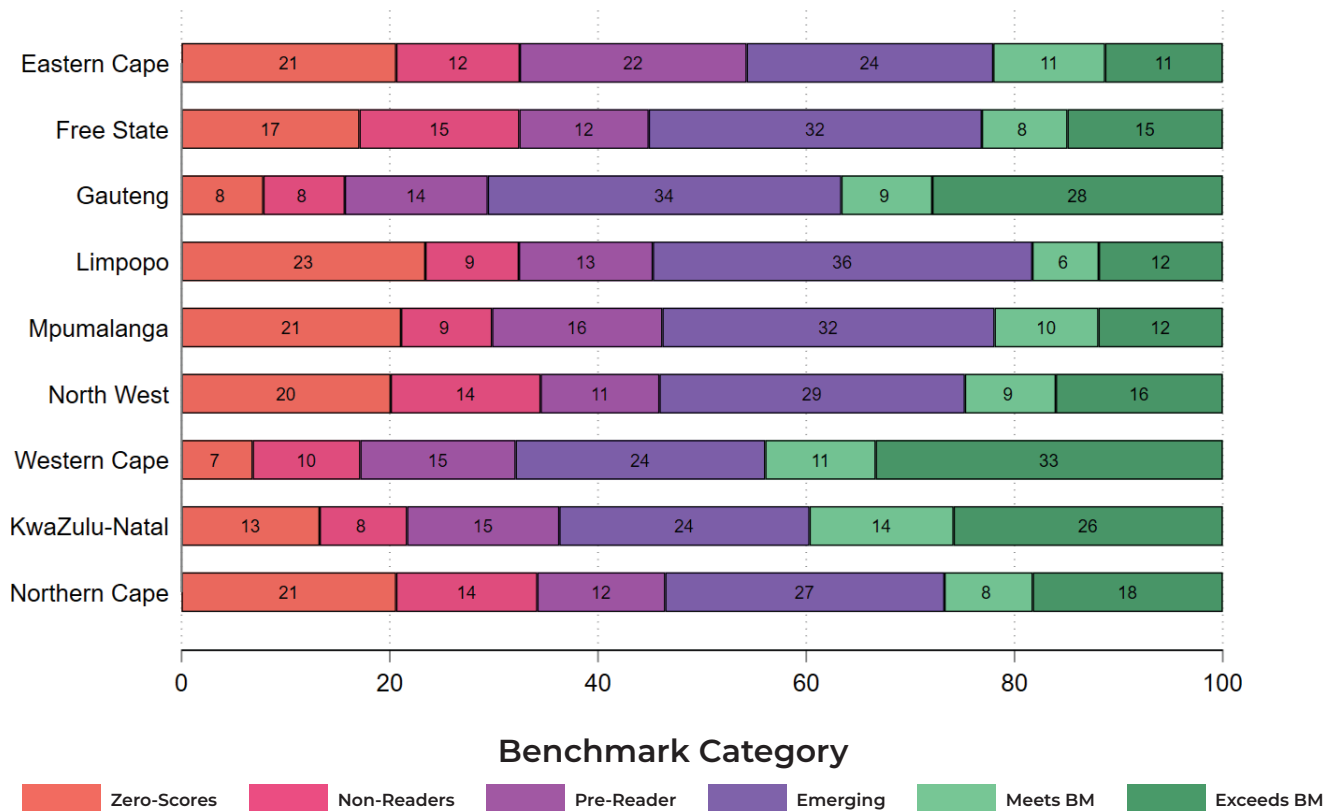
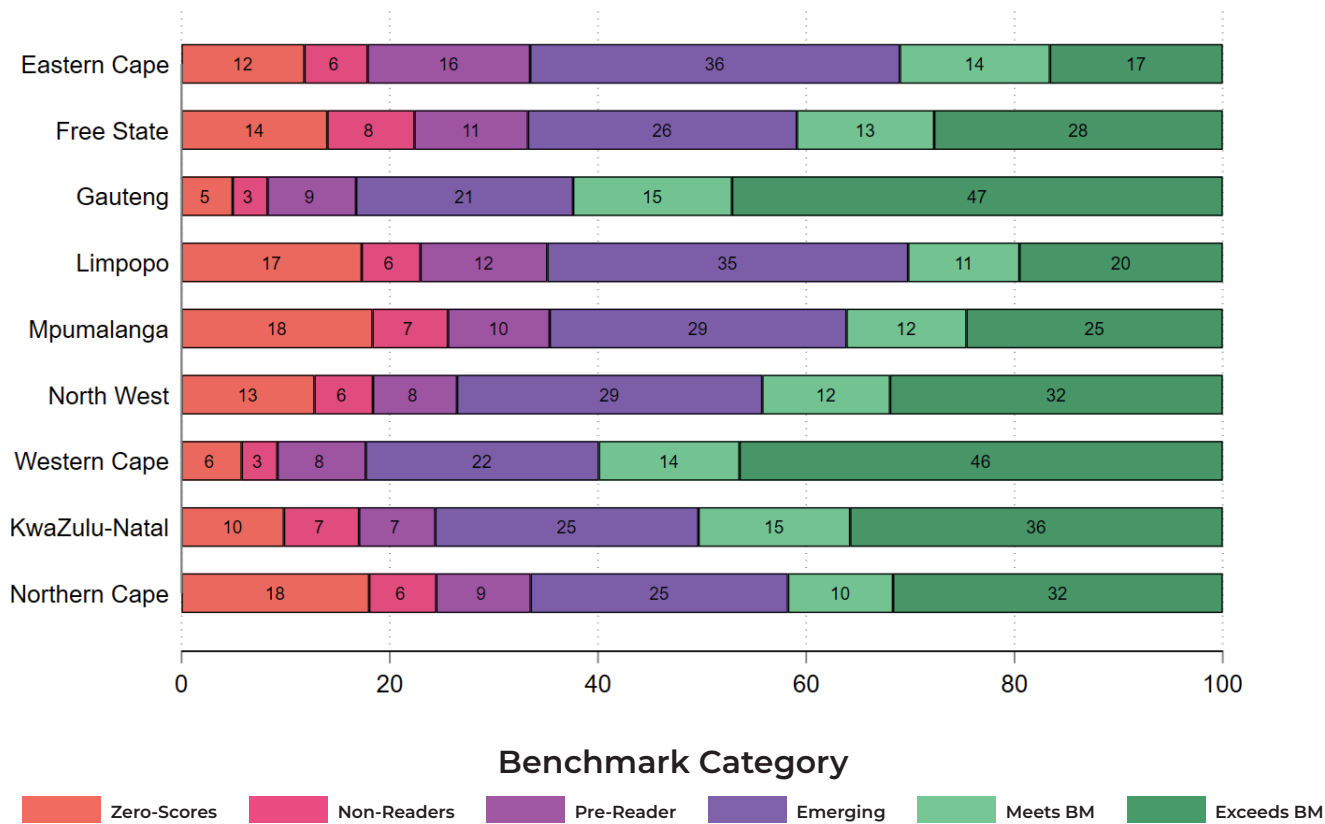


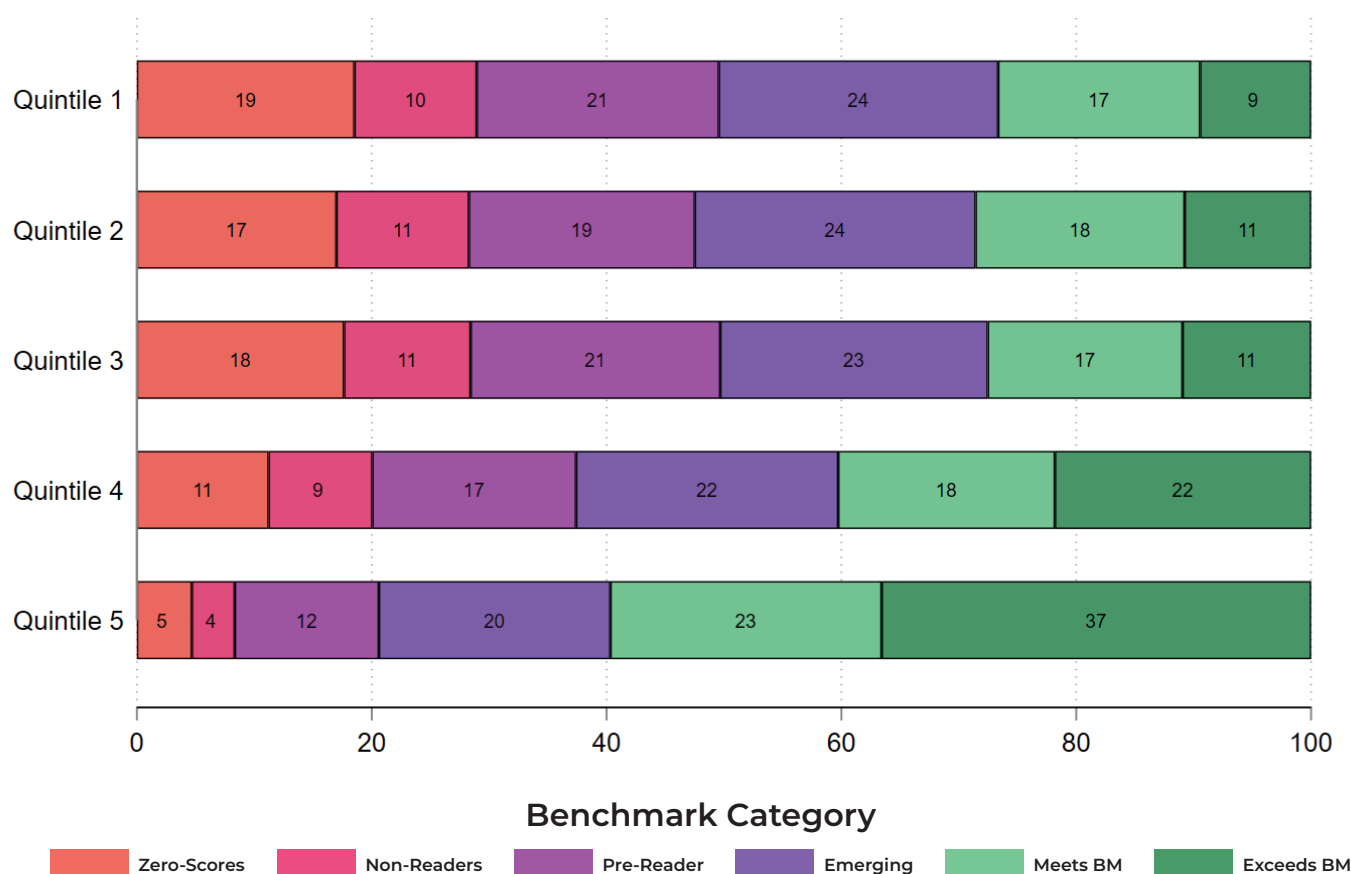
Figure 6.4.8: Categories of HL ORF achievement by province – Grade 4



Categories of achievement by school poverty quintile

Figure 6.4.9 further confirms that socio-economic differences largely explain the disparities observed across languages and provinces. Only 9% of learners in Quintile 5 schools fell into the bottom two categories of readers, compared with almost 30% of learners in Quintile 1 to 3 schools. Conversely, 57% of Quintile 5 learners exceeded the benchmark, compared with only around 10% of learners in Quintiles 1 to 3.

Figure 6.4.9: Categories of ORF achievement by school poverty quintile – All grades



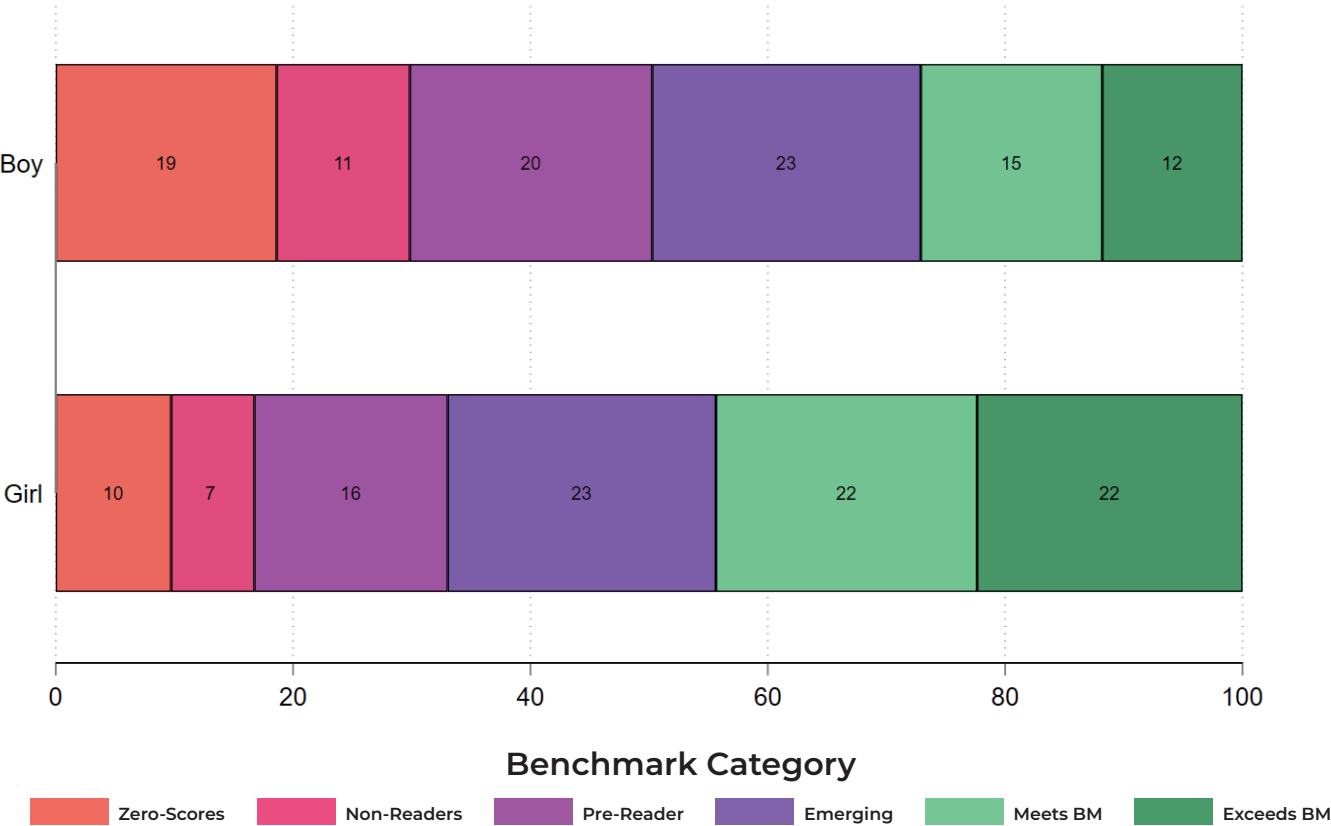
Categories of achievement by learner gender

Figure 6.4.10 shows the categories of achievement by gender. As discussed in greater detail in a later section, there are substantial gaps between boys and girls, with girls significantly outperforming boys. Boys were roughly twice as likely as girls to record a zero score on benchmarked tasks. Around 17% of boys fell into the bottom two categories of non-readers, compared with only 8% of girls. By contrast, 22% of girls exceeded benchmarks, compared with just 12% of boys.

Categories of achievement by learner gender

Figure 6.4.10 shows the categories of achievement by gender. As discussed in greater detail in a later section, there are substantial gaps between boys and girls, with girls significantly outperforming boys. Boys were roughly twice as likely as girls to record a zero score on benchmarked tasks. Around 17% of boys fell into the bottom two categories of non-readers, compared with only 8% of girls. By contrast, 22% of girls exceeded benchmarks, compared with just 12% of boys.

Figure 6.4.10: Categories of ORF achievement by gender – All grades



Gender gaps in reading outcomes

The previous sections have already alluded to the fact that girl learners are significantly outperforming boy learners across all measures of early reading. This section presents more detailed evidence of these gender gaps. It should also be noted that FUNS is not alone in finding that girls are outperforming boys. The Progress in International Reading Literacy Study (PIRLS) of 2021 also showed that South African girls in Grade 4 were roughly a full year of learning ahead of boys in the same grade.

There is also increasing evidence that early inequalities in learning between boys and girls translate into later educational inequalities. For a number of years now, there have consistently been more female candidates in the National Senior Certificate examinations, and more female graduates from post-school education and training institutions, than males. This underscores the importance of understanding how these learning inequalities emerge and evolve during the early years of schooling.

Figure 6.5.1 shows the gender gaps in reaching reading benchmarks for each grade. In Grade 1, approximately 37% of girls reached the benchmark of 40 correct letter sounds per minute, compared to about 26% of boys. The gaps are larger in Grades 2, 3, and 4, where the benchmarks are based on oral reading fluency (words read correctly per minute).

Figure 6.5.2 presents the same analysis for each language, combining Grades 1 to 4 into a single analysis. Although girls outperform boys in all languages, the gaps are smaller among English and Afrikaans learners. Across the African languages, girls are roughly twice as likely to reach the reading benchmarks as their male counterparts.

Figure 6.5.3 confirms a similar pattern of substantial gender gaps across all nine provinces. Figure 6.5.4 shows that these gaps are largest in Quintile 1 to 3 schools, where girls are roughly twice as likely to reach the benchmarks as boys. In Quintile 5 schools, by contrast, girls are only about 17% more likely to reach the benchmark than boys.

Figure 6.5.1: Gender gaps in reaching benchmarks across grades

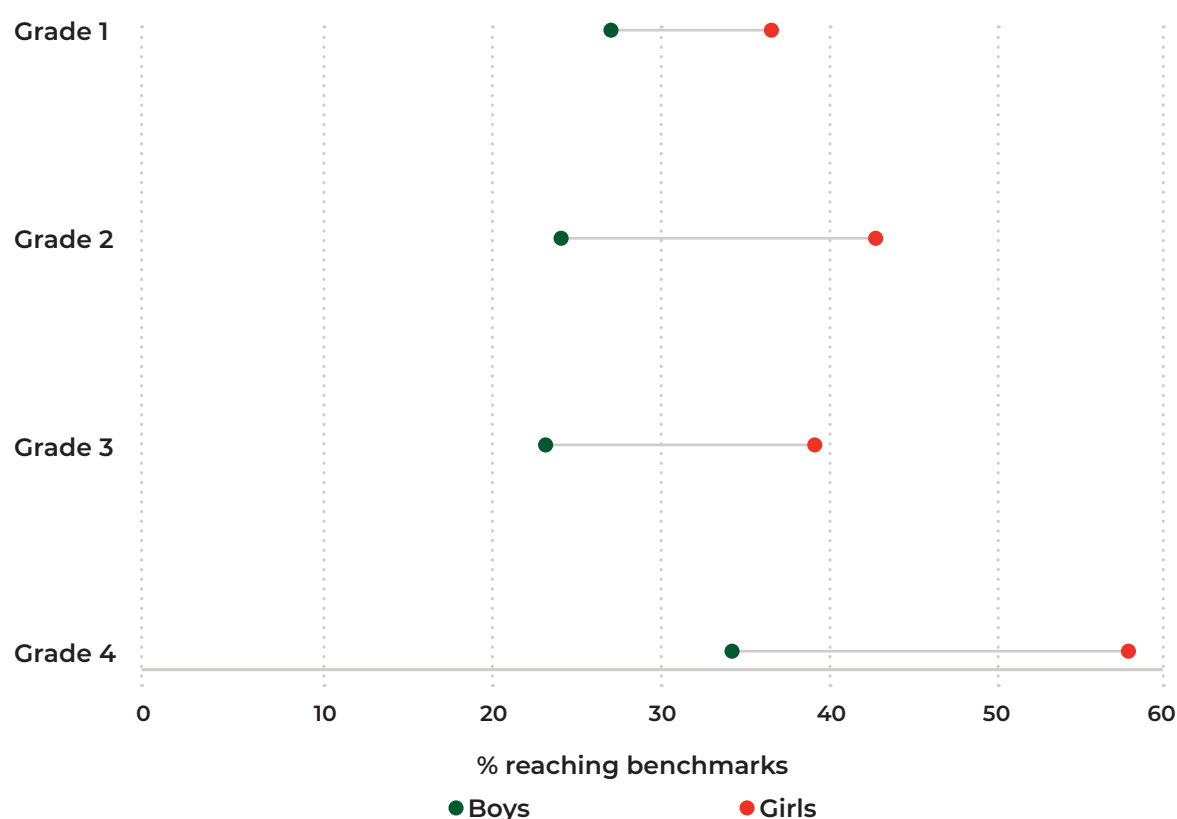


Figure 6.5.2: Gender gaps in reaching benchmarks across languages

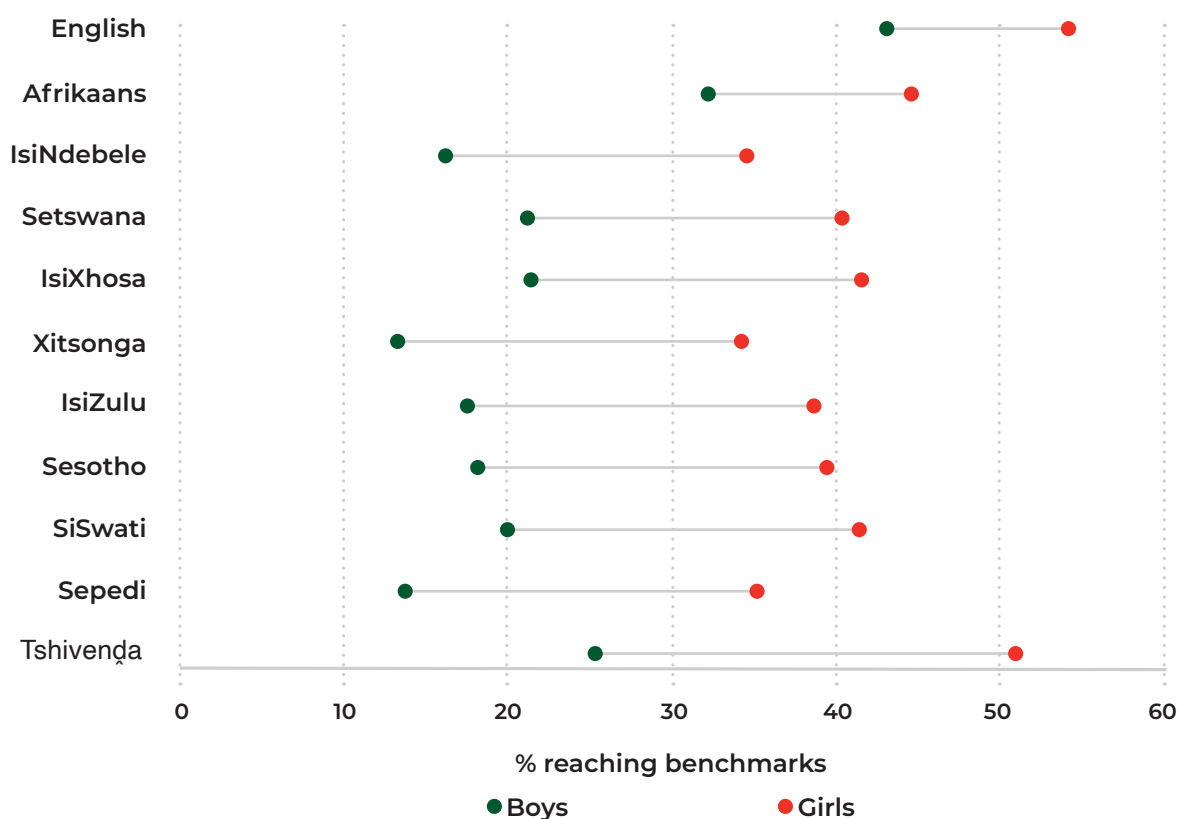


Figure 6.5.3: Gender gaps in reaching benchmarks across provinces

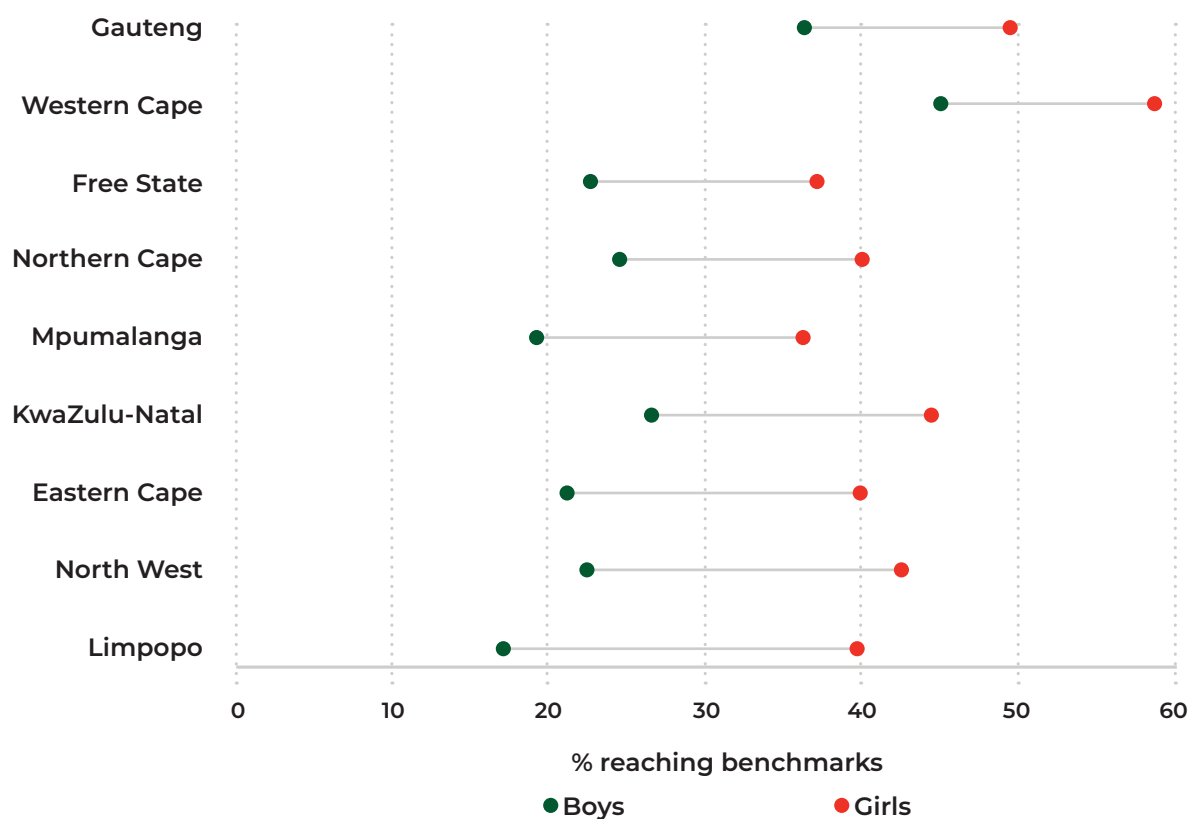


Figure 6.5.4: Gender gaps in reaching benchmarks across school poverty quintiles

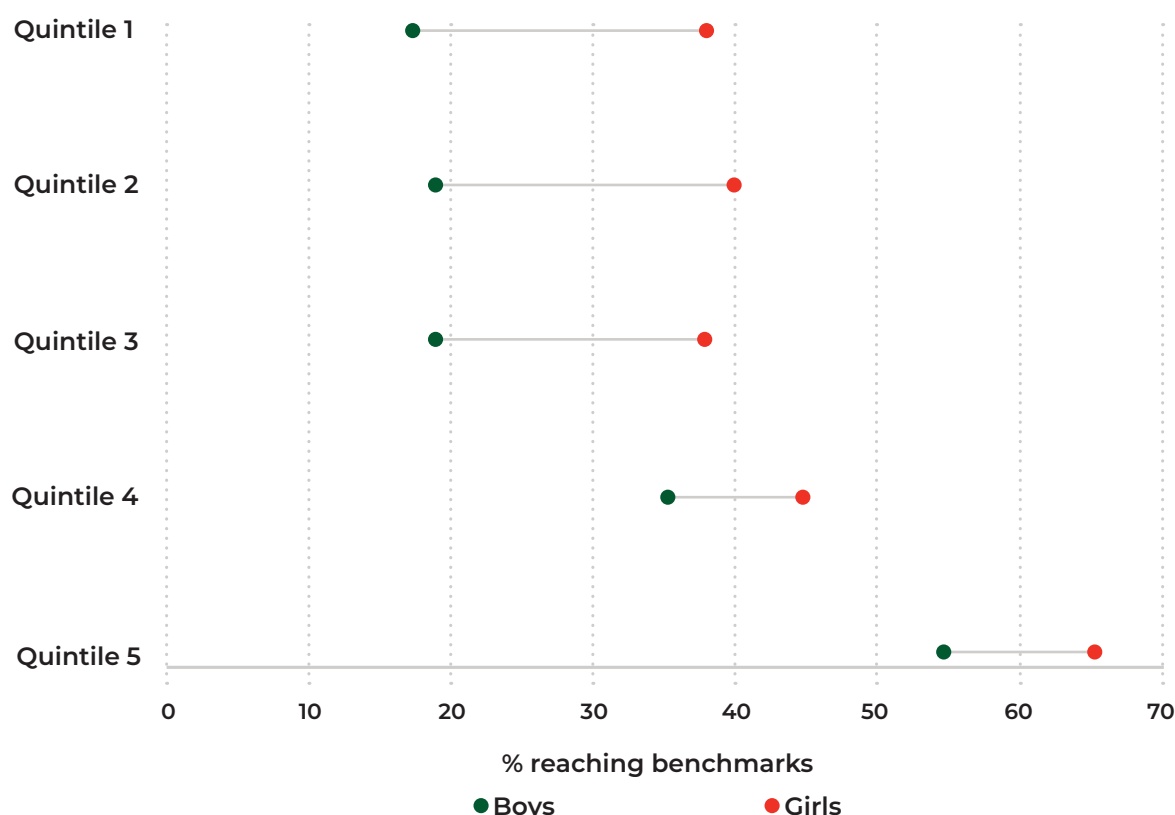
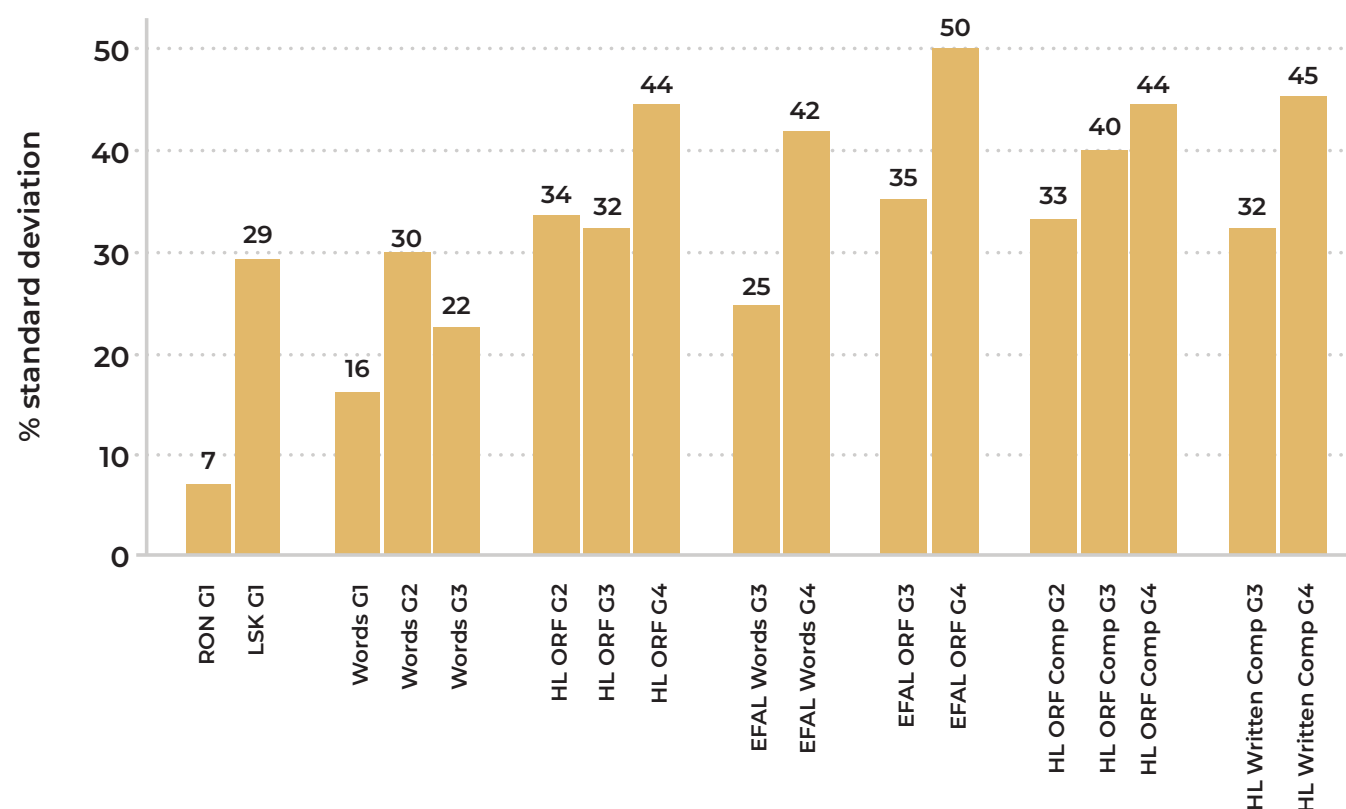


Figure 6.5.5 shows the gender gaps across a range of grades and assessment tasks, expressed as a percentage of a standard deviation on each task. For example, the gap between Grade 2 boys and girls in home-language oral reading fluency is just over 9 words read correctly per minute. Given that the standard deviation on this task is about 27 words per minute, we can say that the gender gap represents approximately 34% of a standard deviation.

The value of this approach is that it creates a metric that is comparable across tasks, which allows us to see how large the learning gaps are across different grades and tasks. A clear pattern emerges: the gender gaps widen as learners progress through the grades and as the reading skills being assessed become more complex. Rapid Object Naming shows the smallest gender gap, while letter-sound recognition in Grade 1 displays a moderate gap. However, the gender gaps become much larger in the higher grades and in tasks that demand more advanced skills, such as comprehension and reading in an additional language — in this case, EFAL.

A year of learning as measured by the home language ORF passage common across grades 3 and 4 is estimated to be 31% of the grade 3 standard deviation. The fact that the gender gaps observed in home language ORF are all greater than 31% of a standard deviation implies that the gender gaps on this outcome are at least equivalent to a full year of learning.

Figure 6.5.5: Gender gaps as a percentage of a standard deviation



Comprehension

Comprehension is the ultimate goal of reading and a central outcome in monitoring early grade literacy. While oral reading fluency (ORF) provides a measure of decoding speed and accuracy, comprehension reflects whether learners can construct meaning from text.

FUNS tested comprehension in several ways. Firstly, during the orally administered individual assessment, each learner participated in two Home Language Oral Reading Fluency (ORF) assessments, followed by a comprehension assessment relating to the passage they had just read. Secondly, a similar orally administered EFAL comprehension test was given to learners in Grades 3 and two such assessments given to learners in Grade 4. Finally, a written comprehension assessment was also administered to grade 3 and 4 learners in a group context. This section describes the outcomes of each of these comprehension assessments.

Taken together, these assessments provide a rich picture of how comprehension develops across grades, how it differs by question type, and how outcomes vary across languages, provinces, socio-economic groups, and gender.

HL ORF Comprehension

For the purposes of measuring ORF, the number of words read correctly at the one-minute mark was recorded; however, learners were given a full three minutes to read through the passage to allow them adequate opportunity to complete the entire passage for the sake of answering the comprehension questions. Despite this, weaker readers still did not complete the full passage. Based on how far they read, the assessment was programmed only to administer comprehension questions covering the part of the passage they had read. For non-readers who could not read a single word, none of the comprehension questions would have been administered, and the learner would thus also get a zero score for the comprehension task.

The Home Language assessments were either out of 11 questions or out of 12 questions and overall percentage scores were calculated. Two alternative ways of calculating the overall comprehension score were explored: Item Response Theory using a 1-parameter model, and a factor analysis using Principal Components Analysis. These methods do not give equal weight to each item but attach greater weight to those items which appear to contribute better towards the underlying construct being measured - comprehension in this case. However, the comprehension scores based on these approaches were so highly correlated with the simple percentage scores that it was preferred to present the results using percentage scores for ease of interpretation.

Tables 6.6.1 through 6.6.4 show the average comprehension scores on the grade-appropriate comprehension passage for each of Grades 1 to 4. Comprehension scores improve over the grades as children become more proficient readers. The fact that comprehension improves only slightly between Grade 3 and Grade 4 (43% to 44%) is largely a reflection of the fact that the Grade 4 passage was more difficult than the Grade 3 passage, rather than an indication that underlying comprehension ability was stagnant across Grades 3 to 4. In fact, the average comprehension score improves from 43% in Grade 3 to 51% in Grade 4 when using the same comprehension test.

Table 6.6.1 shows the results by language of the assessment. Across the grades, children assessed in English did the best in comprehension, but this is largely a function of their socio-economic advantages relative to those in other language groups.

Table 6.6.2 shows the average comprehension scores by province. Here the Western Cape and Gauteng consistently had the highest comprehension scores, but once again this is largely a reflection of socio-economic differences across the provinces.

This is clearly evident in Table 3, which shows average scores by school poverty quintile. Quintiles 1 to 3 schools perform very similarly across all grades, whereas Quintile 4 schools perform significantly better and Quintile 5 schools perform substantially better.

Table 6.6.4 shows significant gender gaps in favour of girls, with a possible widening of the gender gap in the higher grades.

Table 6.6.1: Mean HL ORF comprehension scores (%) in grade-appropriate test by language

	Grade 1	Grade 2	Grade 3	Grade 4
English	27	49	59	58
Afrikaans	21	36	41	48
Tshivenda	12	40	41	35
Xitsonga	7	22	29	30
IsiNdebele	9	32	34	39
IsiZulu	8	32	38	42
IsiXhosa	9	34	35	35
SiSwati	8	27	32	33
Sepedi	9	25	32	34
Setswana	7	23	33	33
Sesotho	9	24	32	37
Total	15	36	43	44

Table 6.6.2: Mean HL ORF comprehension scores (%) in grade-appropriate test by province

	Grade 1	Grade 2	Grade 3	Grade 4
Eastern Cape	11	33	38	39
Free State	10	23	32	38
Gauteng	21	43	51	56
Limpopo	11	27	35	34
Mpumalanga	10	27	35	35
North West	10	26	34	37
Western Cape	24	48	54	55
KwaZulu-Natal	15	40	47	46
Northern Cape	12	23	36	36
Total	15	36	43	44

Table 6.6.3: Mean HL ORF comprehension scores (%) in grade-appropriate test by quintile

	Grade 1	Grade 2	Grade 3	Grade 4
Quintile 1	9	28	33	36
Quintile 2	9	28	35	36
Quintile 3	9	29	36	39
Quintile 4	18	43	50	50
Quintile 5	35	57	67	66
Total	15	36	43	44

Table 6.6.4: Mean HL ORF comprehension scores (%) in grade-appropriate test by gender

	Grade 1	Grade 2	Grade 3	Grade 4
Boys	13	31	37	38
Girls	17	41	49	50
Total	15	36	43	44

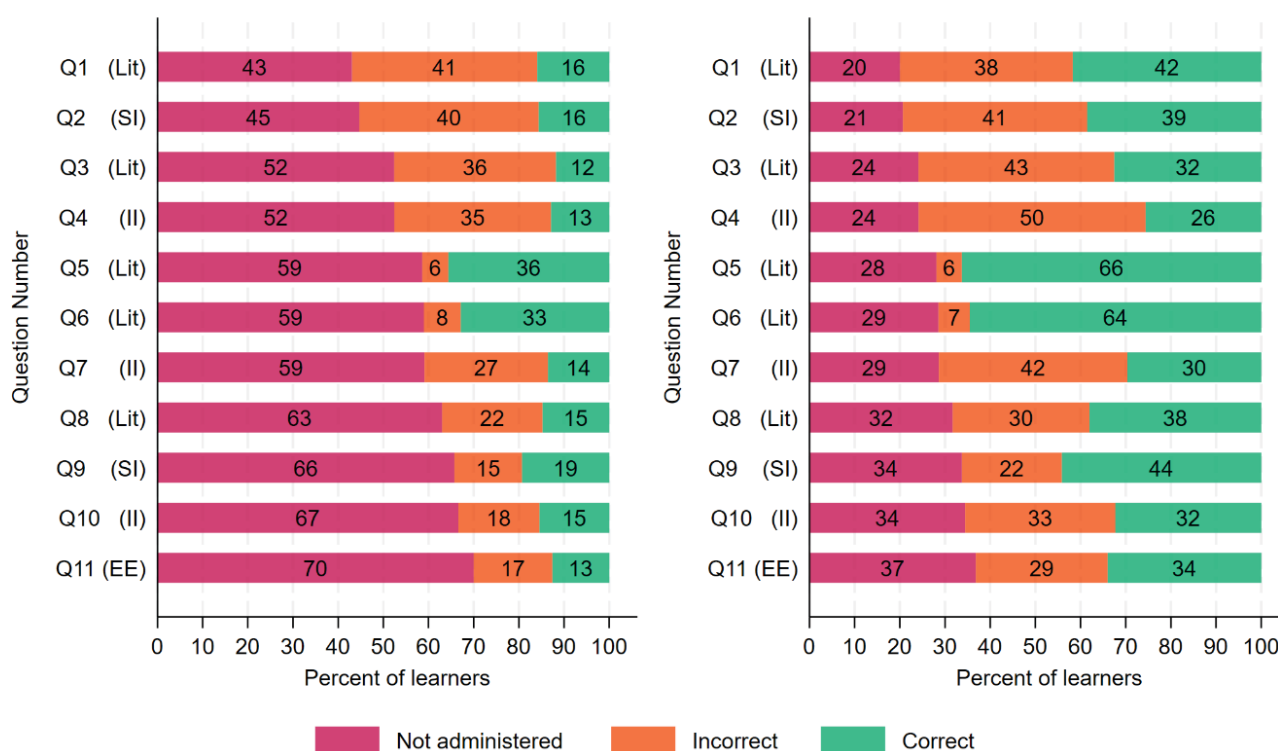
Figures 6.6.1 to 6.6.3 present the item-level outcomes on the comprehension tests administered after the oral reading fluency (ORF) task. For each grade, two ORF passages were used: one grade-appropriate passage and one that was the previous grade's grade-level passage. This design allows for comparisons of learners in adjacent grades on the same comprehension assessments.

For example, Figure 6.6.1 shows outcomes across each of the 11 questions in the ORF comprehension passage administered to both Grade 1 and Grade 2 learners. Each item has three possible outcomes: the learner answered correctly, answered incorrectly, or was not administered the question at all. Questions were only administered if learners had read far enough in the passage to encounter the relevant content. Thus, Question 1 drew on information from the beginning of the passage, while the final question was based on information found at the end.

As Figure 6.6.1 illustrates, 43% of Grade 1 learners were not administered even the first comprehension question, as they were essentially non-readers scoring zero or near zero on oral reading fluency. Across all figures, a consistent pattern emerges: with each subsequent question, a larger proportion of learners were not administered the item because they had not read far enough in the text. By Grade 4, however, only 11% of learners missed the very first comprehension question, reflecting the smaller proportion of non-readers at this stage.

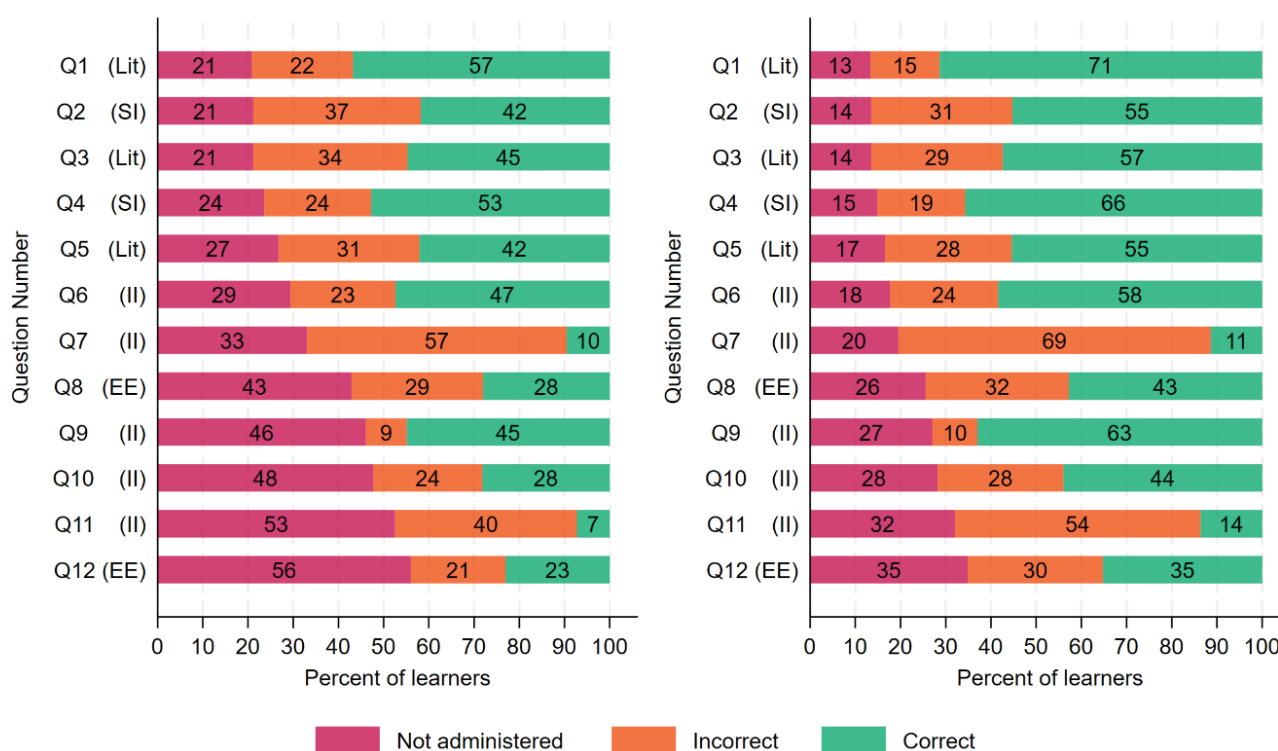
Figures 6.6.1 to 6.6.3 also indicate the type of comprehension question represented by each item. Questions were categorised into four types: literal, straightforward inference, interpretation and integration, and examine and evaluate. These types were distributed across the items, although there were fewer “examine and evaluate” questions, and these tended to appear later in the assessments.

Figure 6.6.1: Item outcomes for Grade 1 (Left) and Grade 2 (Right) on the same ORF comprehension



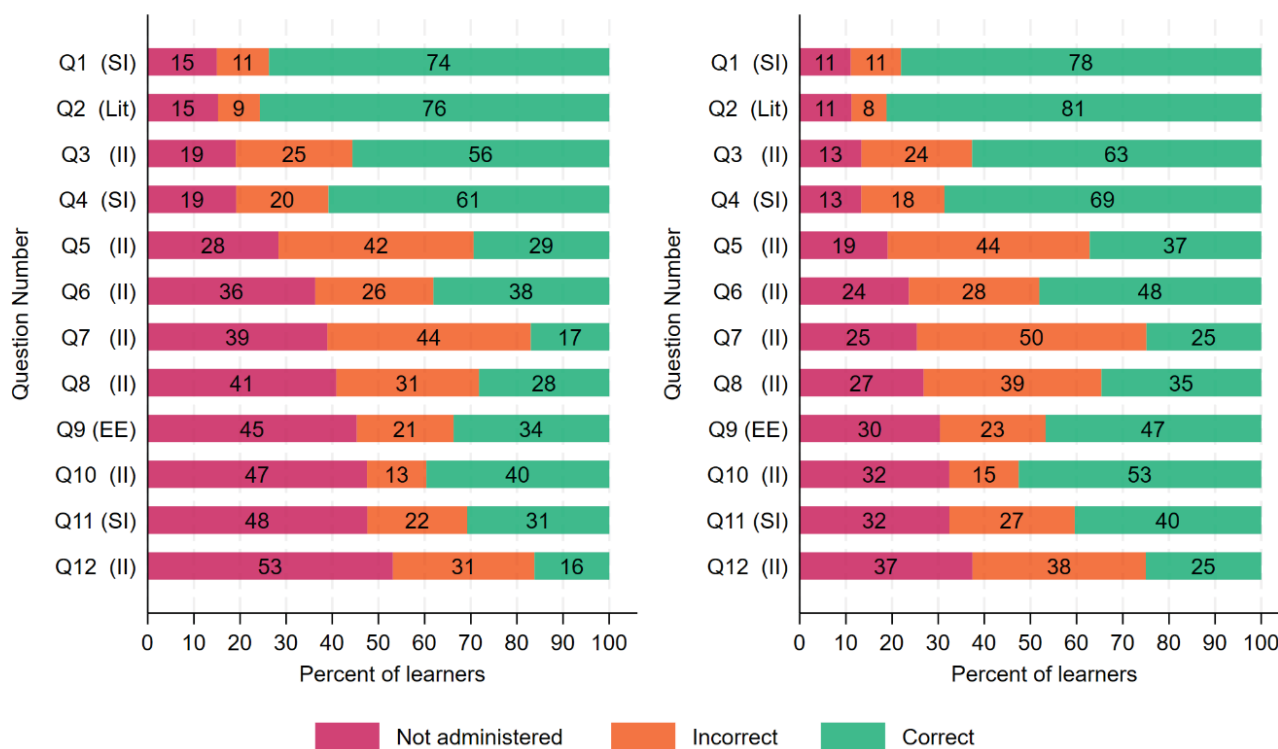
Note: Lit = Literal questions; SI = Straightforward inference; II = Interpret & Integrate; EE = Examine & Evaluate

Figure 6.6.2: Item outcomes for Grade 2 (Left) and Grade 3 (Right) on the same ORF comprehension



Note: Lit = Literal questions; SI = Straightforward inference; II = Interpret & Integrate; EE = Examine & Evaluate

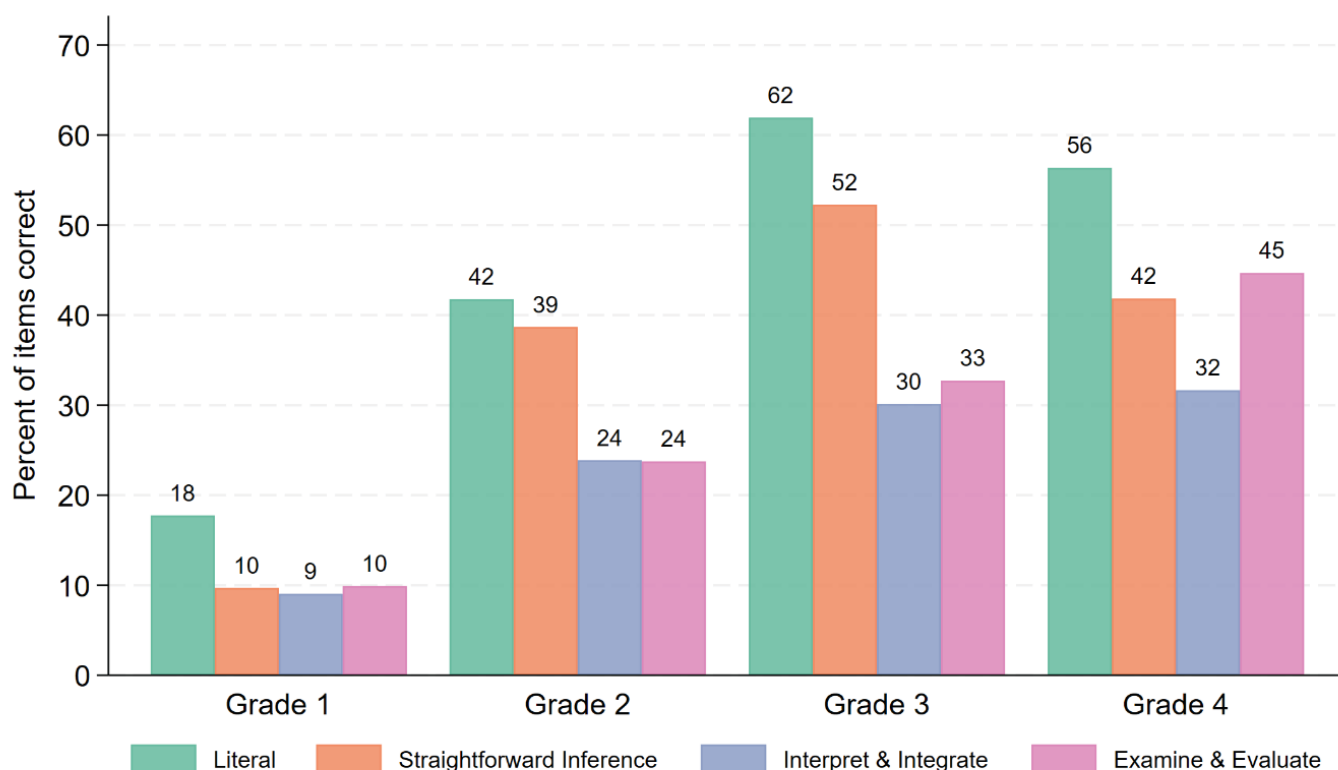
Figure 6.6.3: Item outcomes for Grade 3 (Left) and Grade 4 (Right) on the same ORF comprehension



Note: Lit = Literal questions; SI = Straightforward inference; II = Interpret & Integrate; EE = Examine & Evaluate

Figure 6.6.4 shows the average percentage correct across the four types of items, taken from both ORF passages in each grade. Across all grades, learners were most likely to answer literal questions correctly, while questions requiring interpretation and integration were the least likely to be answered correctly. There is however considerable variation in question difficulty within each category.

Figure 6.6.4: Percentage correct by type of question in each grade (HL ORF comprehension)



To further investigate the relative difficulty of the four different item types, it was important to account for the position of each item within the assessment. Items appearing earlier in the test were more likely to be answered correctly simply because they were more likely to have been administered, depending on how far learners read in the passage. For this reason, a multivariable regression model was used to predict the likelihood of a correct response, based on the following explanatory variables: (1) the grade of the learner, (2) the item type, (3) the item's position within the assessment, and (4) whether the passage was a grade-level passage or from the previous grade level. The results are presented in Table 6.6.5.

Advancing by one grade was associated with a roughly 10-percentage-point increase in the likelihood of answering an item correctly. Compared to literal questions, all three other item types were more difficult, even after controlling for item position and passage level. "Interpret and integrate" questions were the most challenging, with learners being 14% less likely to answer these correctly. Learners were about 9% less likely to answer straightforward inference questions correctly, and about 5% less likely for examine and evaluate questions. In addition, each item appearing one place later in the assessment was associated with a 2% lower likelihood of being answered correctly.

Overall, the analysis confirmed that literal questions were the easiest for learners, followed by examine and evaluate, then straightforward inference, with interpret and integrate questions proving to be the most difficult.

Table 6.5.5: Linear Probability Model predicting a correct item response

	(I) score
Grade	0.10*** (0.002)
SI	-0.09*** (0.002)
II	-0.14*** (0.002)
EE	-0.05*** (0.003)
Item number	-0.02*** (0.000)
Grade-level	-0.05*** (0.001)
Constant	0.32*** (0.006)
Observations	647151
Adj. R-sq.	0.104

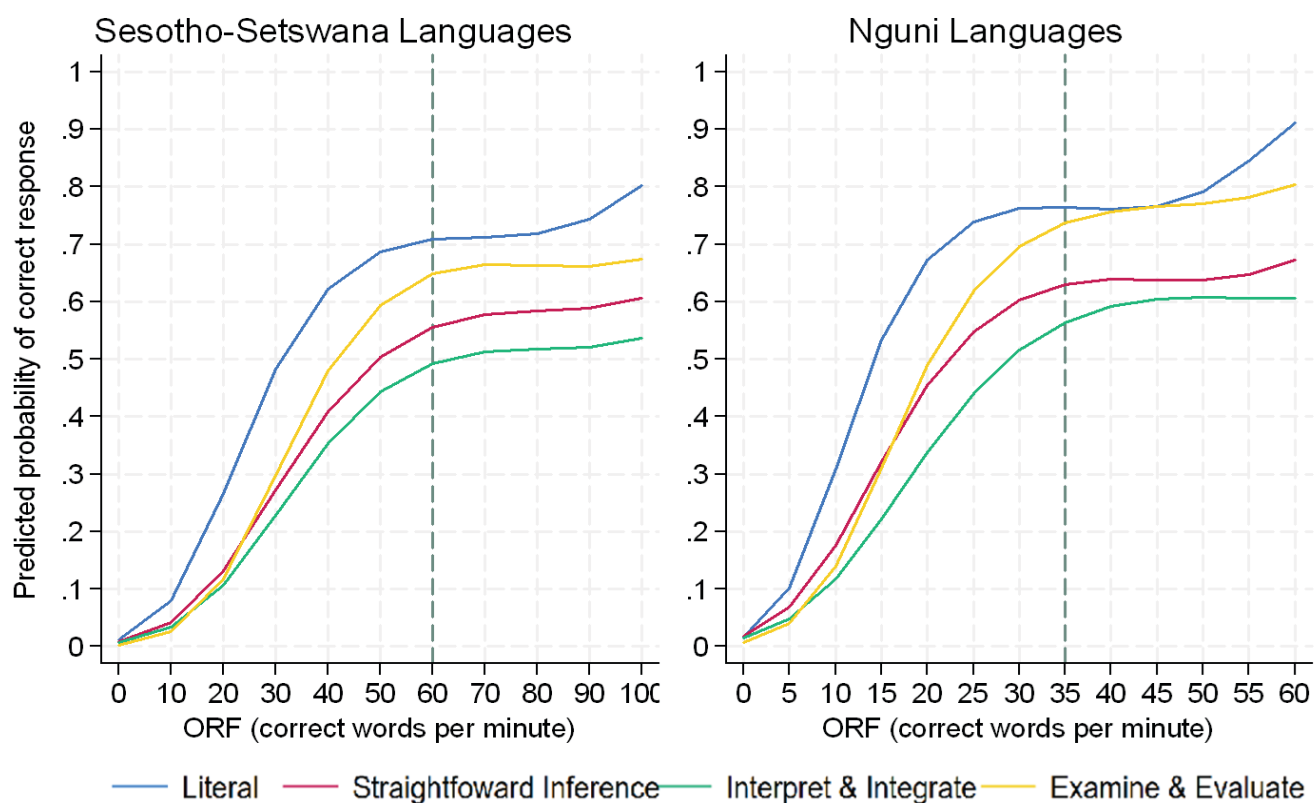
Standard errors in parentheses
 * p < 0.10, ** p < 0.05, *** p < 0.01

It is also interesting to note that a learner's ORF was more highly correlated with getting an item correct for literal items than for SI, II and EE. Similarly, ORF explains more of the variation in literal comprehension (based on the R-squared statistic) than for SI, II and EE. This means that the ability to decode fluently will go a long way toward being able to answer literal questions, whereas questions requiring more complex reasoning may require other skills in addition to decoding fluency.

In order to further understand the relative difficulty of the different item types, a set of logistic regression models were run to predict the probability of answering an item correctly. The explanatory variable of interest was the item type, but these models also controlled for the learner's grade, gender and Oral Reading Fluency (ORF), as well as the item's number in the assessment. The item type was interacted with ORF (which was specified in a cubic form) so that the relationship between ORF and the probability of answering correctly could vary by item type and did not have to be a straight line. Separate models were run for the SeSesotho-Tswana languages and for the Nguni languages because of the different orthographies. The resulting predicted probabilities of answering an item correctly are visually depicted in Figure 6.6.5.

At all levels of fluency, the literal items were always more likely to be answered correctly than the other types of items, while the "Interpret & Integrate" items were least likely to be correctly answered. The lines for literal items are initially steeper than the other lines implying that improvements in fluency have the largest impact on the chances of answering a literal question correctly. However, fluency strongly improves the chances of answering correctly for all item types. The lines do flatten out, however, roughly at the point where the Grade 3 benchmarks have been set. This lends support to rationale behind the fluency benchmarks: reaching these benchmarks are clearly important for reading with comprehension, but further increases in reading speed are not as strongly linked to better comprehension.

Figure 6.6.5: Predicted item score based on ORF and item type



Note: The dashed vertical lines indicate the grade 3 Home Language benchmark for Sesotho-Tswana languages (60 words correct per minute) and for Nguni languages (35 words correct per minute).

EFAL ORF Comprehension

Similar comprehension assessments were administered orally for EFAL. These EFAL assessments were only conducted in Grade 3—where one passage was administered—and in Grade 4, where two passages were administered, one of which was the same passage given to Grade 3 learners. Tables 6.6.6 through 6.6.9 present the average EFAL ORF comprehension scores. The first passage, administered to both Grade 3 and Grade 4 learners, contained eight questions, while the second passage contained ten.

Children who had been assessed in English as their home language also participated in the EFAL assessment, and unsurprisingly, performed better than children of other home languages, as shown in Table 6.6.6. This reflects both their linguistic advantage (English being their home language) and their generally higher socio-economic status. The fact that Afrikaans children were the second-best performers in EFAL comprehension most likely reflects their socio-economic advantage relative to children in the other nine languages.

Nationally, the average score increased from 17.8% in Grade 3 to 26.4% in Grade 4 on the same test. This illustrates the learning gains made over a year of schooling, but also raises concern that Grade 4 performance on a Grade 3-level assessment is still only 26.4% on average. On the Grade 4-level passage, the average comprehension score for Grade 4 learners was just 17%. This underscores the challenges faced by most learners when transitioning from home-language instruction to English as the language of learning and teaching in Grade 4.

The poor comprehension outcomes in both EFAL and home-language assessments at the Grade 4 level strengthen the case for extending mother tongue-based bilingual education beyond the foundation phase. Such an extension would provide learners with more years to develop reading comprehension and literacy skills in their home language before transitioning fully to English.

Table 6.6.7 shows that Gauteng achieved the highest EFAL comprehension scores of all provinces, which was not the case for HL comprehension. This could reflect greater exposure to English in Gauteng, while its relative underperformance in HL could reflect the challenge of its uniquely multilingual context compared to other provinces. In contrast, the Eastern Cape and Limpopo, both with many schools in deep rural areas and less exposure to English, had the lowest average comprehension scores.

Table 6.6.8 shows wide gaps in EFAL comprehension by socio-economic status – even wider than was the case for HL. For example, grade 3 learners in Quintile 1 schools achieved 8% on average compared to 55% for learners in Quintile 5 schools. Table 6.6.9 shows significant gender gaps once again, with these being slightly larger at grade 4 than at grade 3.

Table 6.6.6: Mean EFAL ORF comprehension scores (%) by language

	Grade 3 ORF1	Grade 4 ORF1	Grade 4 ORF2
English	45	54	38
Afrikaans	25	36	20
Tshivenda	9	13	8
Xitsonga	6	13	7
IsiNdebele	11	21	12
IsiZulu	9	17	11
IsiXhosa	10	17	11
SiSwati	10	18	11
Sepedi	10	23	15
Setswana	11	18	11
Sesotho	9	17	10
Total	22	30	20

Table 6.6.7: Mean EFAL ORF comprehension scores (%) by province

	Grade 3 ORF1	Grade 4 ORF1	Grade 4 ORF2
Eastern Cape	15	23	13
Free State	13	22	13
Gauteng	37	48	35
Limpopo	11	21	12
Mpumalanga	13	22	13
North West	14	25	15
Western Cape	33	43	30
KwaZulu-Natal	21	26	18
Northern Cape	17	24	14
Total	22	30	20

Table 6.6.8: Mean EFAL ORF comprehension scores (%) by quintile

	Grade 3 ORF1	Grade 4 ORF1	Grade 4 ORF2
Quintile 1	8	15	8
Quintile 2	11	19	11
Quintile 3	13	23	15
Quintile 4	32	42	28
Quintile 5	55	63	46
Total	22	30	20

Table 6.6.9: Mean EFAL ORF comprehension scores (%) by gender

	Grade 3 ORF1	Grade 4 ORF1	Grade 4 ORF2
Boys	19	26	17
Girls	24	35	23
Total	22	30	20

HL Written Comprehension

A home-language written comprehension assessment was also administered to Grade 3 and 4 learners in a group setting. Learners were given 30 minutes to complete the assessment, which consisted of 15 items, though an extra three items were included in the version given to Grade 4 learners. The design of this assessment was like that of PIRLS, with the key difference being that new passages were developed specifically for the South African setting and versioned into each of language.

Learner performance on the written comprehension assessment was strongly correlated with their performance on the orally administered home-language comprehension assessment, with a correlation coefficient of 0.68. This demonstrates the strong predictive value of orally administered EGRA-type assessments for the kinds of comprehension tests used in international assessments such as PIRLS.

Overall, comprehension scores were broadly similar across the written and orally administered assessments, though averages were slightly lower in the written assessment. Figure 6.6.6 shows the average home-language written comprehension scores by language for Grades 3 and 4. As with the oral assessments, English-speaking learners achieved the highest average scores, followed by Afrikaans learners. This pattern was mirrored in the provincial results, with Western Cape and Gauteng recording the highest scores, again largely reflecting socio-economic factors.

Figure 6.6.8 illustrates the familiar inequalities across school poverty quintiles, while Figure 6.6.9 shows clear gender gaps, with girls outperforming boys. Figures 6.6.10 and 6.6.11 present item-level outcomes within the written comprehension test. Because all learners had the full 30 minutes to complete the assessment, every learner had the opportunity to attempt each question, regardless of reading ability. As a result, most learners attempted at least one or two items. However, larger proportions of children did not respond to the final few items, likely due to fatigue or time running out of time.

Six of the items were in multiple choice format, while the others required open-ended written responses. Interestingly, average performance was almost identical across the two types of questions.

Figure 6.6.6: Average HL written comprehension scores by language

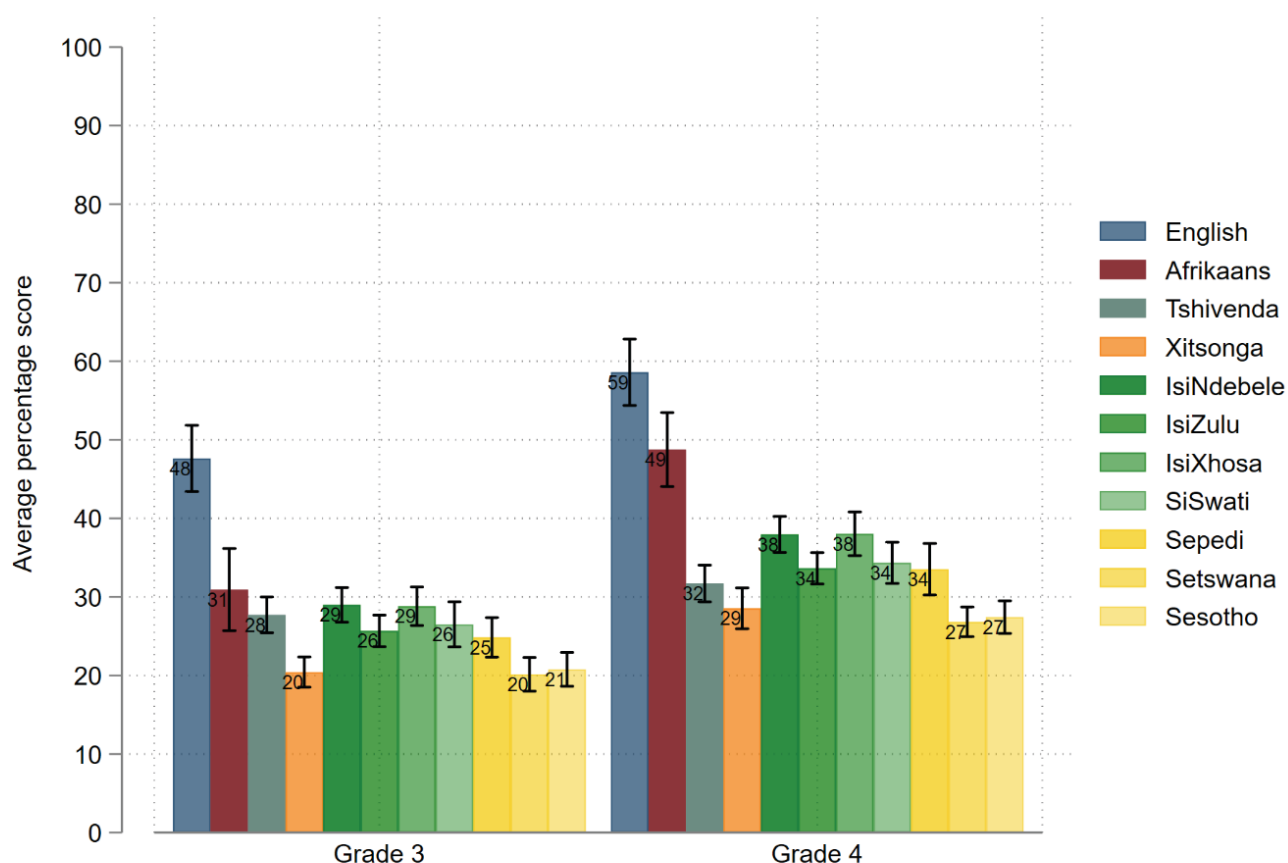


Figure 6.6.7: Average HL written comprehension scores by province

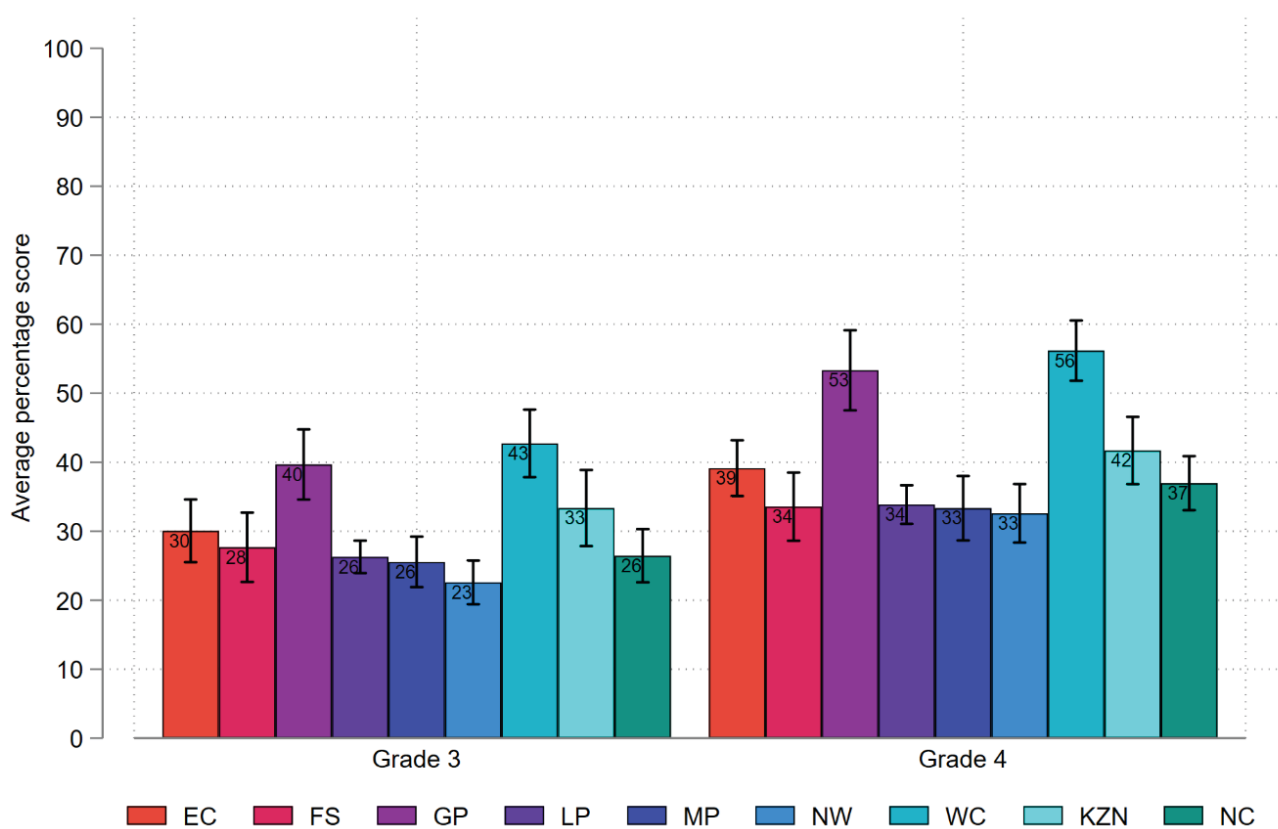


Figure 6.6.8: Average HL written comprehension scores by quintile

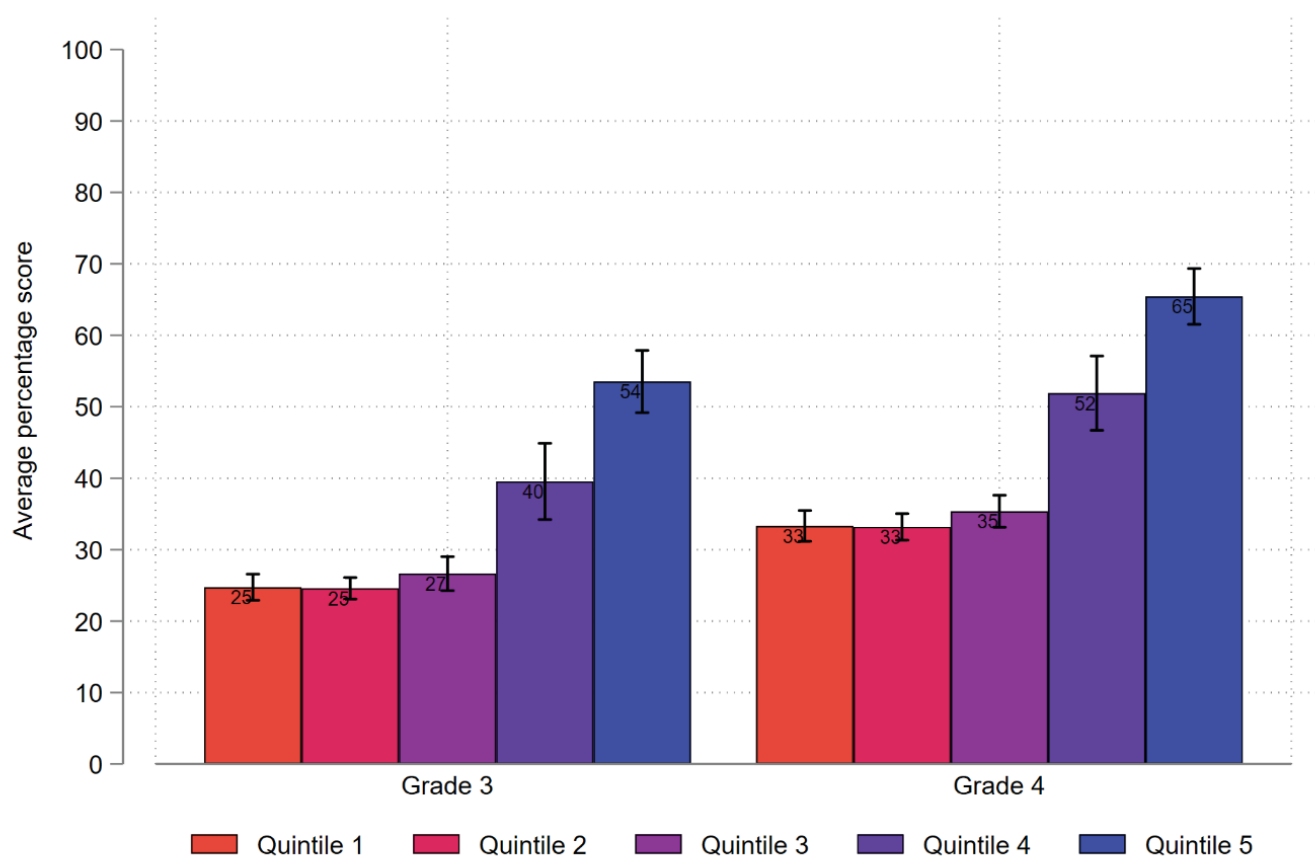


Figure 6.6.9: Average HL written comprehension scores by gender

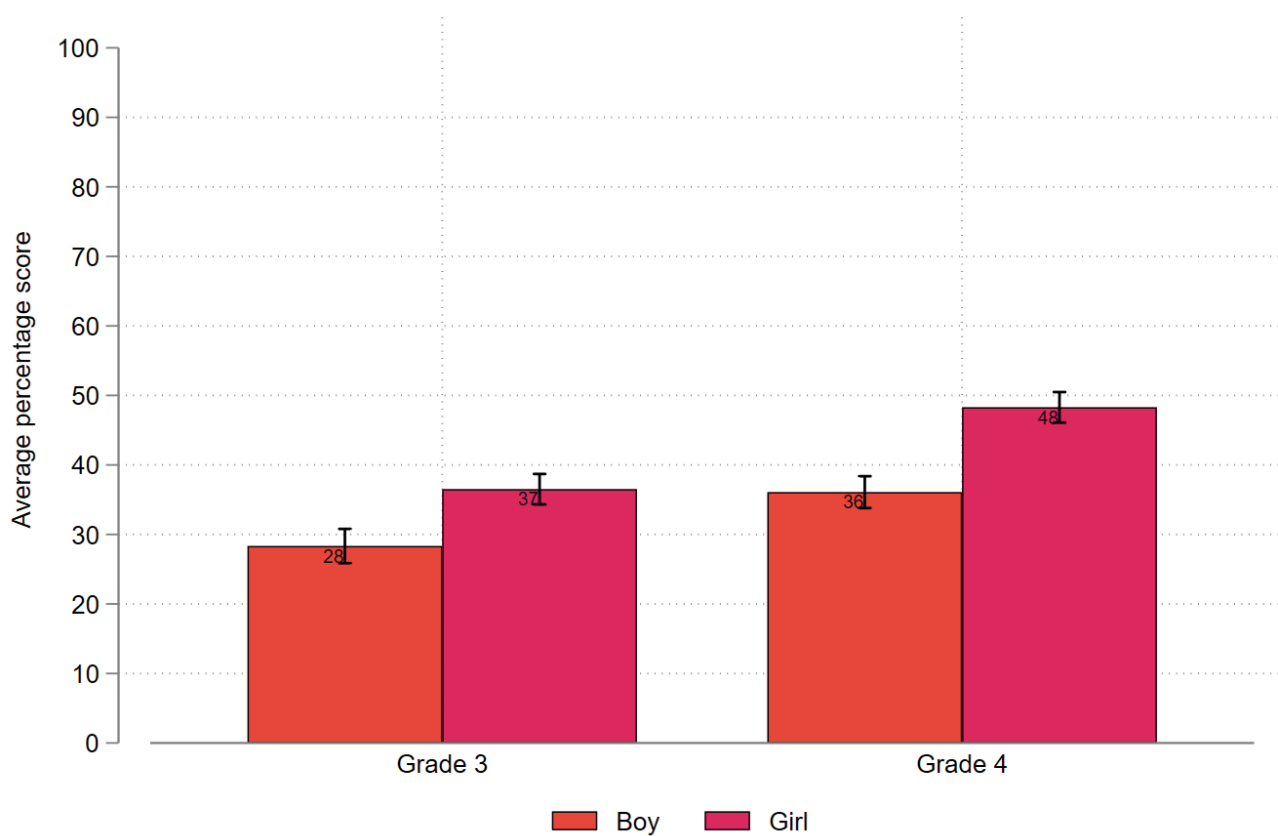


Figure 6.6.10: Item outcomes for Grade 3 written comprehension

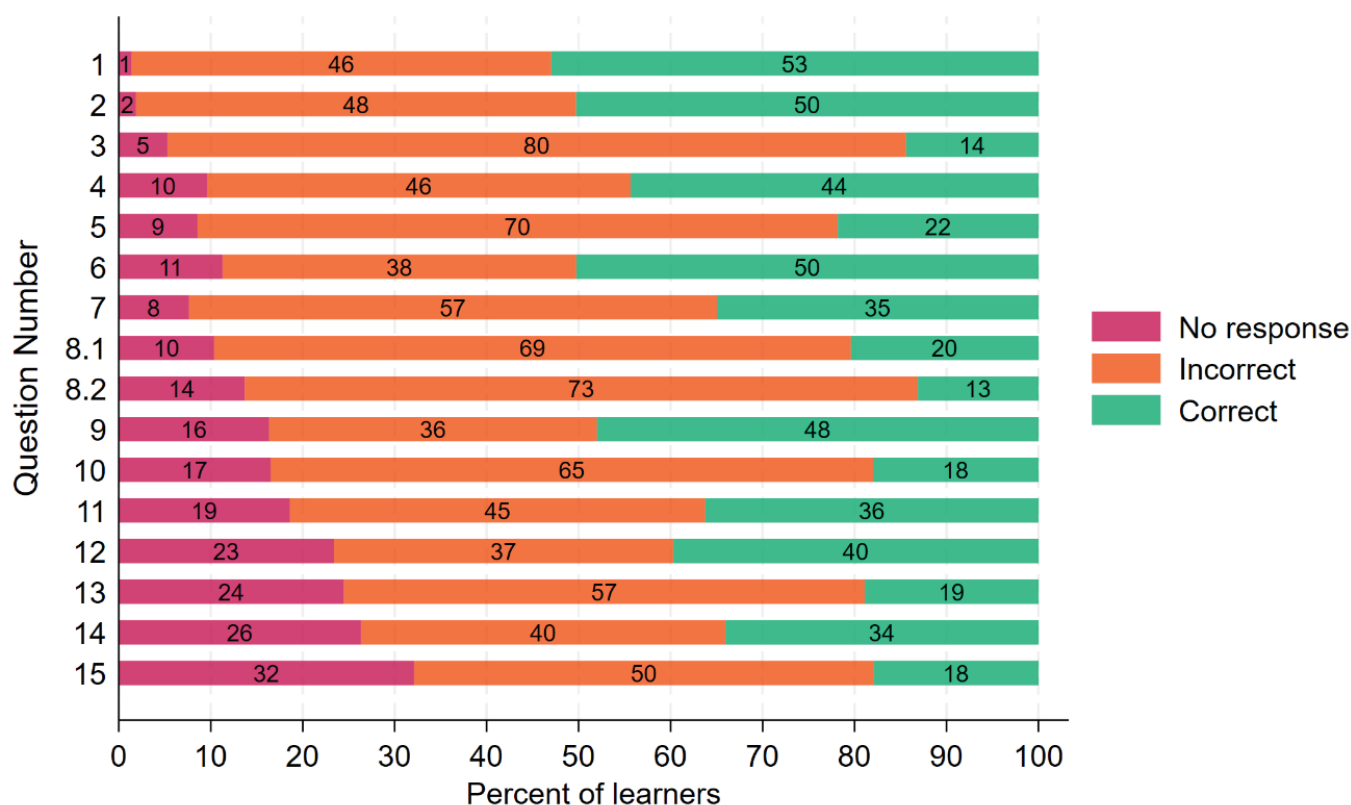
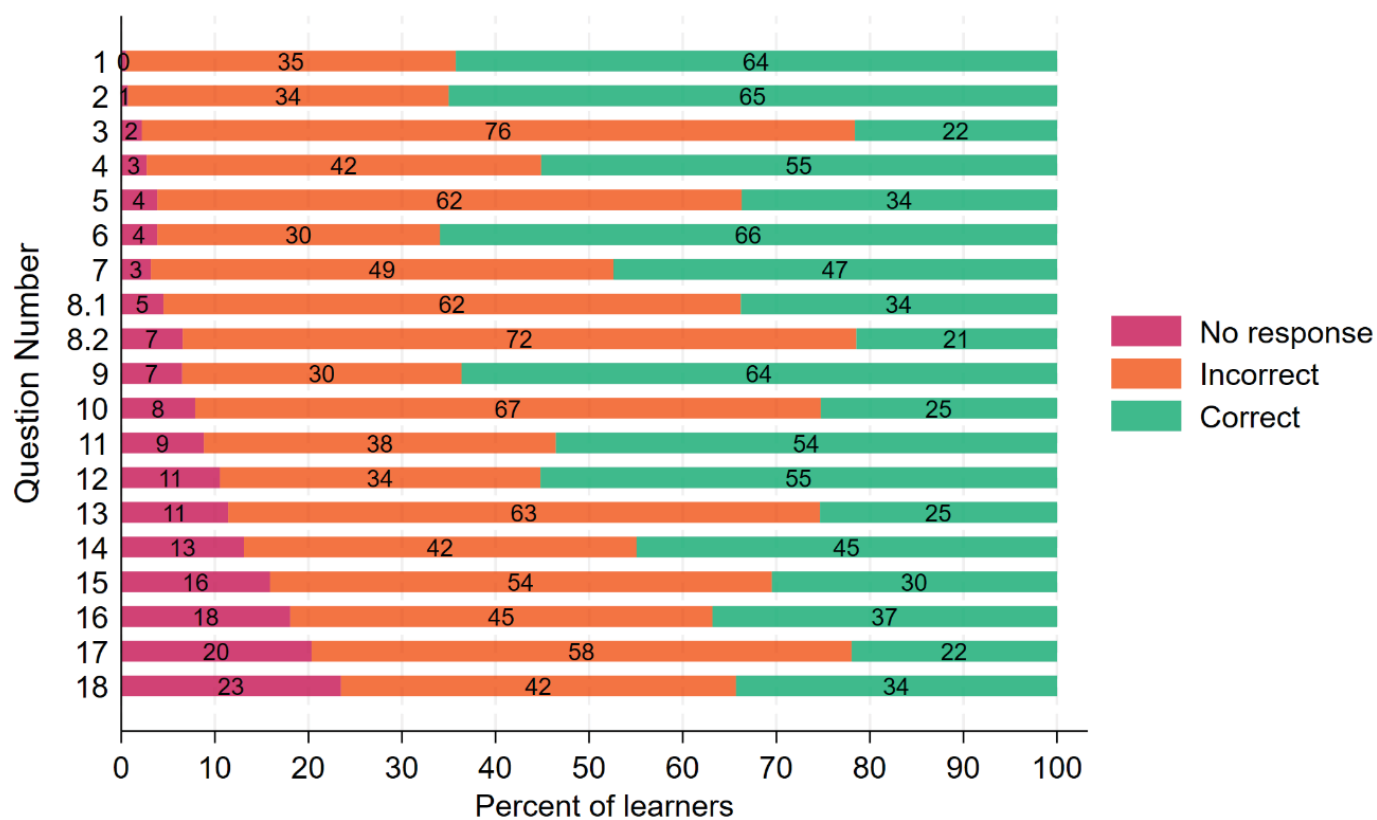


Figure 6.6.11: Item outcomes for Grade 4 written comprehension



Conclusion

Across all three comprehension assessments, a consistent story emerges: while learners show measurable gains in comprehension as they progress through the grades, overall performance remains low, particularly once children transition to English as the language of learning and teaching in Grade 4. Large and persistent inequalities are evident by socio-economic status, province, and home language, with girls outperforming boys throughout. Item-level analyses further reveal that learners find literal questions easier, while interpretive and integrative tasks present the greatest difficulty, highlighting the need to strengthen higher-order comprehension skills.

These results highlight the importance of extending mother tongue-based bilingual education beyond the foundation phase, ensuring that learners have a stronger foundation in reading with comprehension in their home language before transitioning to English. They also highlight the need for targeted instructional support, both to improve decoding fluency and to build the deeper comprehension skills required for academic success in later grades.

Relationships between domains

FUNS offers a unique opportunity to examine the relationships between various foundational reading skills and to see how these may differ by language groups. This topic is relevant for the design and focus of foundational literacy programming. Much research can be done using this data, but this section presents some preliminary analysis of the relationships across domains of reading.

Correlations across tasks

The first way to assess the relationships across the various tasks in the assessment is to consider pairwise correlations. These are shown for the Home Language tasks in Table 6.7.1.

Table 6.7.1: Pairwise correlations across Home Language tasks

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Object Naming	1.00								
(2) Letter sounds	0.39	1.00							
(3) HL Words	0.35	0.49	1.00						
(4) HL ORF1	0.34	0.52	0.82	1.00					
(5) HL ORF2	0.35	0.49	0.84	0.94	1.00				
(6) HL Comp 1	0.33	0.51	0.72	0.74	0.72	1.00			
(7) HL Comp 2	0.33	0.49	0.76	0.77	0.78	0.85	1.00		
(8) Written comp		0.29	0.69	0.66	0.65	0.63	0.68	1.00	
(9) semantics		0.22	0.45	0.28	0.26	0.48	0.47	0.48	1.00

The strongest correlations are between HL ORF1 and HL ORF2 and between HL Comp1 and HL Comp2. This is reassuring as it confirms that the two different measures of ORF are giving a reliable signal, and similarly for the two different measures of ORF comprehension. It is also important to note that the written assessment is well correlated with the measures of reading generated through the oral assessment, except for letter sound recognition. However, this is not surprising since letter sound recognition first influences ORF, which in turn influences comprehension.

Semantic knowledge is moderately correlated with comprehension, but only weakly correlated with the decoding skills of letter sound recognition and Oral Reading Fluency. This is consistent with the notion that decoding skills and semantic knowledge are separate domains of learning, which work together to allow meaning-making.

The pairwise correlations across the various EFAL tasks administered to learners in Grade 3 and 4 is shown in Table 6.7.2. These correlations are all high, indicating strong validity across the EFAL tasks.

Table 6.7.2: Pairwise correlations across EFAL tasks

Variables	(1)	(2)	(3)	(4)	(5)
(1) EFAL Words	1.00				
(2) EFAL ORF1	0.92	1.00			
(3) EFAL ORF2	0.90	0.92	1.00		
(4) EFAL Comp 1	0.70	0.68	0.69	1.00	
(5) EFAL Comp 2	0.67	0.64	0.70	0.78	1.00

Rapid object naming and letter sound recognition

The first task administered to Grade 1 children—and only to Grade 1 children—was Rapid Object Naming, to recap in this task, learners were given 20 seconds to identify objects presented to them on a chart, such as a dog or a table. Only five objects were used, but the learner chart repeated them in different orders, resulting in a total of 36 items. At the end of 20 seconds, the number of objects correctly named was converted into a per-minute score.

The rationale for administering this task is that it provides insight into the speed and efficiency of cognitive processes that support fluent reading. These are not reading outcomes in themselves, but they are predictive of learning to read. A learner's Rapid Object Naming proficiency may also reflect their early learning opportunities and overall school readiness. On average, Grade 1 learners were able to name 41 objects correctly per minute.

Figure 6.7.1 shows the distributions of Rapid Object Naming by official school poverty quintile and learner gender. Only children in Quintile 4 and 5 schools—those in more affluent areas—tended to have higher Rapid Object Naming scores, compared to children in poorer contexts who may not have had the same early learning opportunities. However, it is noteworthy that the inequality observed here is not nearly as sharp as the inequalities found in other reading outcomes documented in this report. This may reflect the fact that Rapid Object Naming is closer to a measure of innate ability, rather than a direct outcome tied to socio-economic status and early learning exposure. However, it may also be that this RON task is a rather noisy measure, not perfectly representing the underlying construct of phonological processing.

It is also worth noting that the gaps between boys and girls are relatively small. This could suggest that both boys and girls may have a similar propensity to learn to read, but may respond differently once exposed to classroom instruction.

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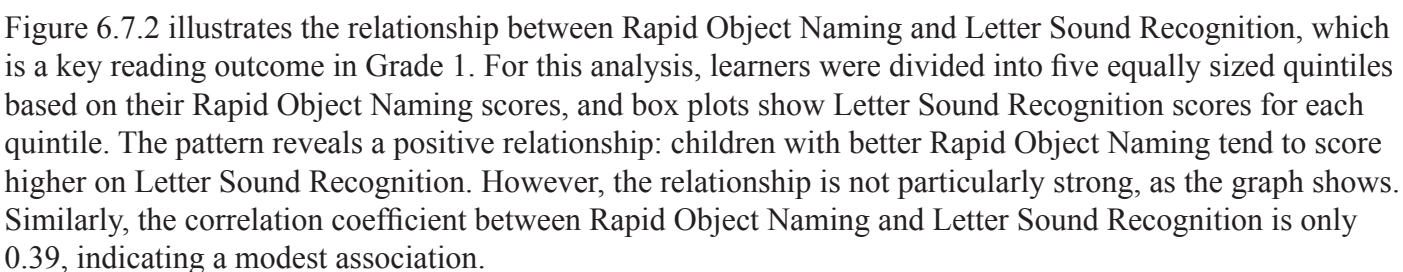
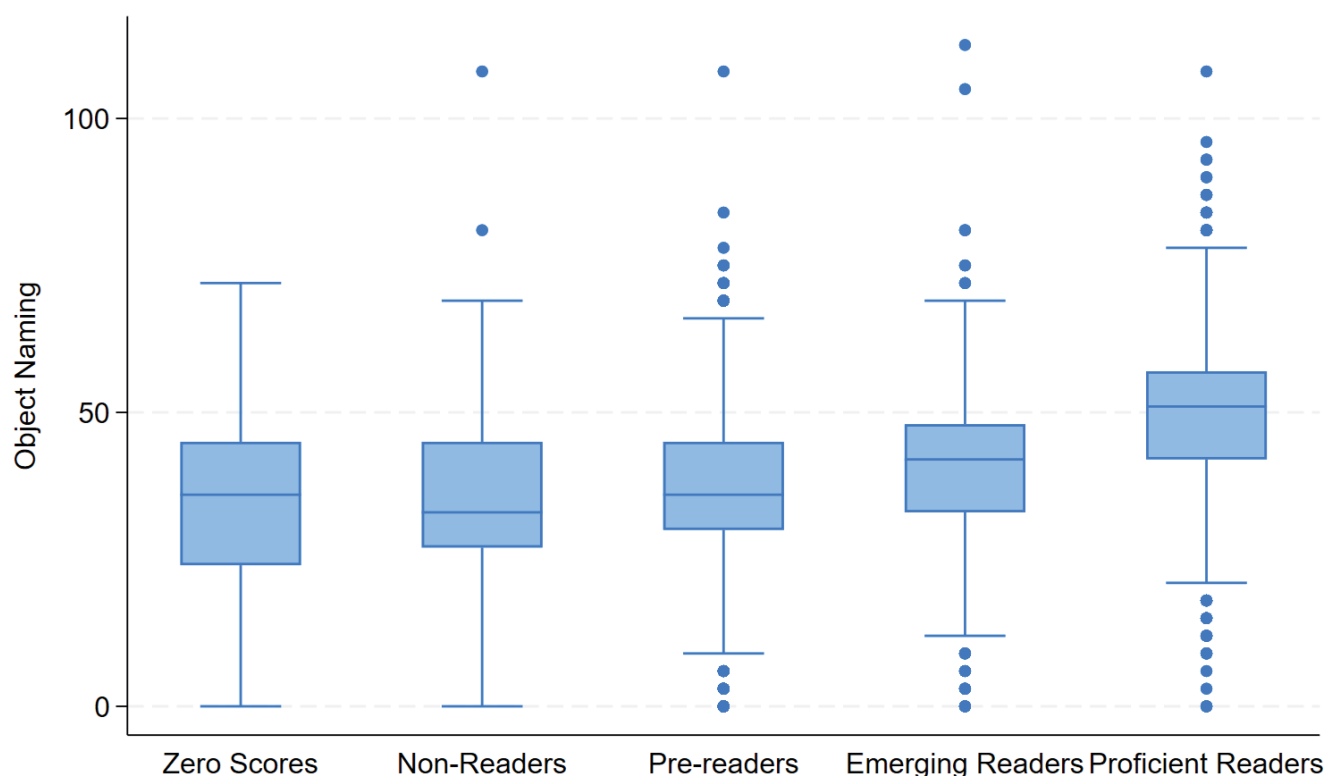


Figure 6.7.2: Box plots of letter sound recognition based on rapid object naming



Figure 6.7.3: Rapid object naming for different categories of Grade 1 reading proficiency



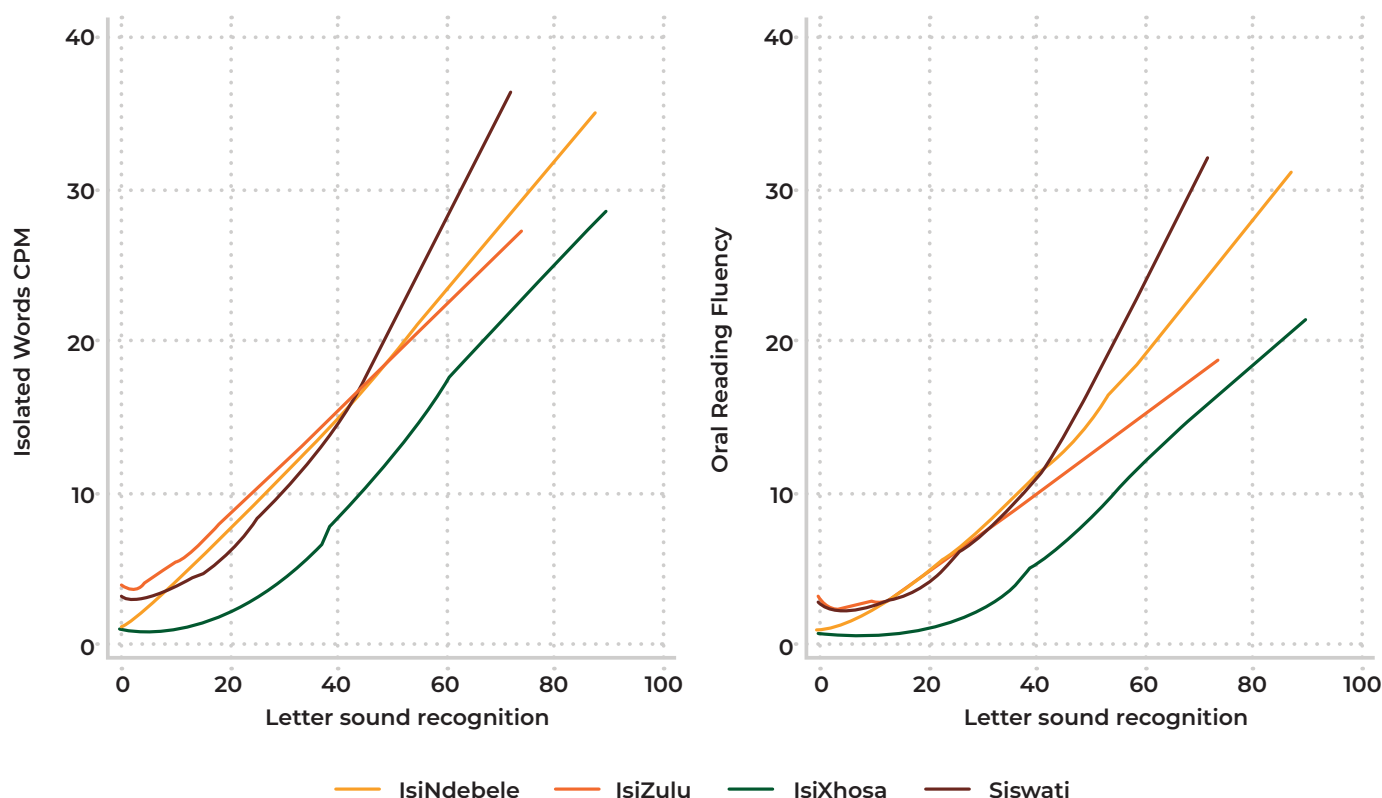
Letter sound recognition and word reading

The DBE reading benchmark for Grade 1 is 40 correct letter sounds per minute. For all other grades ORF (words correct per minute when reading a grade-appropriate passage) is used. It is therefore interesting to note that the pairwise correlations between letter sound recognition and other HL tasks are significantly higher amongst Grade 1 learners (0.59-0.64) than amongst Grade 3 learners (0.33-0.45). This suggests that letter sound knowledge is important during the early stages of learning to read and supports the rationale for using letter sound knowledge as the metric for a Grade 1 benchmark.

Figures 6.7.4, 6.7.5 and 6.7.6 show a strong relationship between letter sound recognition and word reading, whether this is isolated words or connected word reading (ORF). The strength of this relationship holds for all languages. There is, however, an interesting pattern for isiXhosa, which deserves further attention. It has already been seen that isiXhosa-speaking learners do relatively well in meeting the Grade 1 benchmark set against letter sounds recognition but relatively poorly in Grade 2 and 3 where ORF is used as the metric. Figure 6.7.4 further shows that a given level of letter sound recognition in isiXhosa translates into a lower level of word reading compared to other Nguni languages.

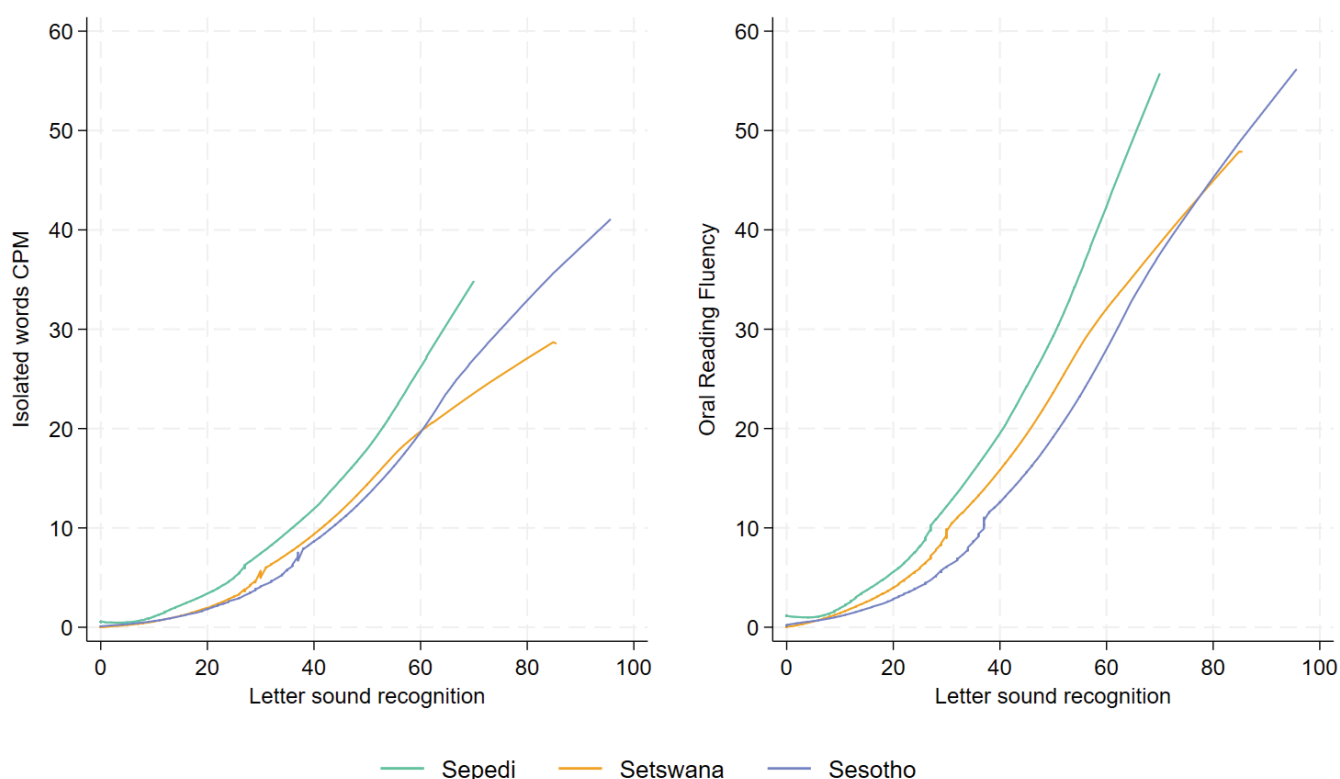


Figure 6.7.4: Relationship between LSK and 1) Words (Left), and 2) ORF (Right) – Nguni languages



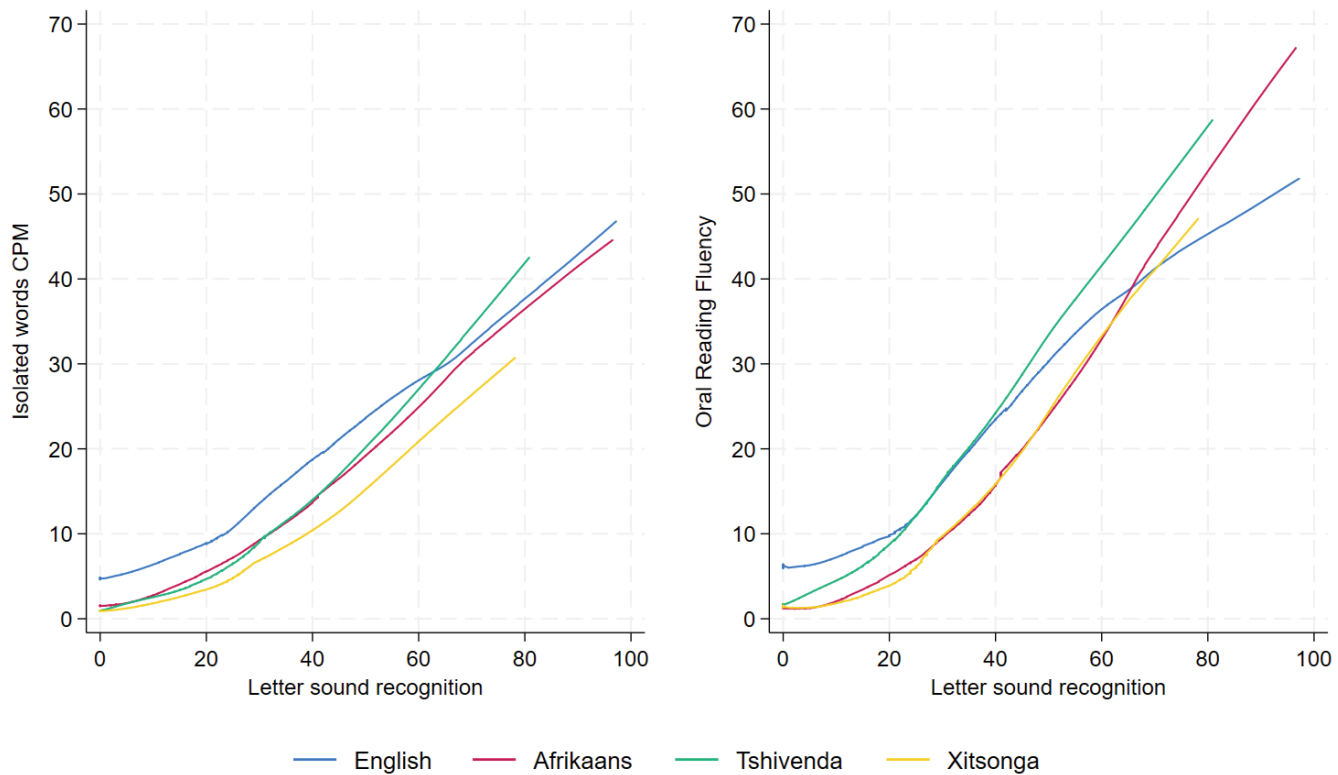
Note: The figure is restricted to Grade 1 learners and shows Lowess smoothing lines.

Figure 6.7.5: Relationship between LSK and 1) Words (Left), and 2) ORF (Right) – SeSesotho-Tswana languages



Note: The figure is restricted to Grade 1 learners and shows Lowess smoothing lines

Figure 6.7.6: Relationship between LSK and 1) Words (Left), and 2) ORF (Right) – Afrikaans, English, Tshivenda & Xitsonga



Note: The figure is restricted to Grade 1 learners and shows Lowess smoothing lines

Oral reading fluency and ORF comprehension

In all grades, two oral reading fluency tasks were administered. The number of words read correctly per minute was recorded at the 60-second mark, but learners were given a full three minutes to continue reading the passage, after which a comprehension assessment was administered. Comprehension questions were only asked if the learner had read far enough in the passage to reach the content related to that particular question. In general, the approach followed when calculating overall comprehension scores was to regard the learner's score as zero if the question was not administered, on the basis that not being able to decode sufficiently also means the learner could not read with adequate comprehension to answer that question. However, this protocol could lead to an artificially strong relationship between oral reading fluency and comprehension. To investigate this issue, three alternative comprehension scores were calculated and compared.

The first was the original method, using all 12 questions. The second was based only on the first eight questions. In this case, the rationale for arguing that a learner's weakness in decoding means they also cannot read with comprehension is stronger, since a three-minute period is more than enough time to have reached these questions in the text. The third approach was to use only the first five questions, which presents an even stronger argument for regarding non-response as evidence of not being able to read. The relationship between oral reading fluency and comprehension under these three approaches is shown in Figures 6.7.7 and 6.7.8, first for Nguni languages and then for Sesotho-Setswana languages. In all cases, there is a strong positive relationship between oral reading fluency and comprehension. In fact, the relationship appears steepest when using the score out of five. However, this largely reflects the fact that the first five questions were on average easier than later questions.

Nevertheless, Figures 6.7.7 and 6.7.8 confirm that there is a genuinely strong relationship between oral reading fluency and comprehension. Not only do learners have to be able to decode a word in order to read it with understanding, but they also have to decode fluently enough to devote sufficient working memory to engaging with the meaning of a passage. It is also notable that the relationship begins to flatten at the point roughly associated with the Grade 3 benchmark. This confirms the rationale for setting oral reading fluency benchmarks at this level: before this point, improvements in fluency are highly necessary for reading with meaning; beyond this point, further improvements in fluency are less critical.

Figure 6.6.7: Relationship between ORF and ORF comprehension for Nguni languages (Grade 3)

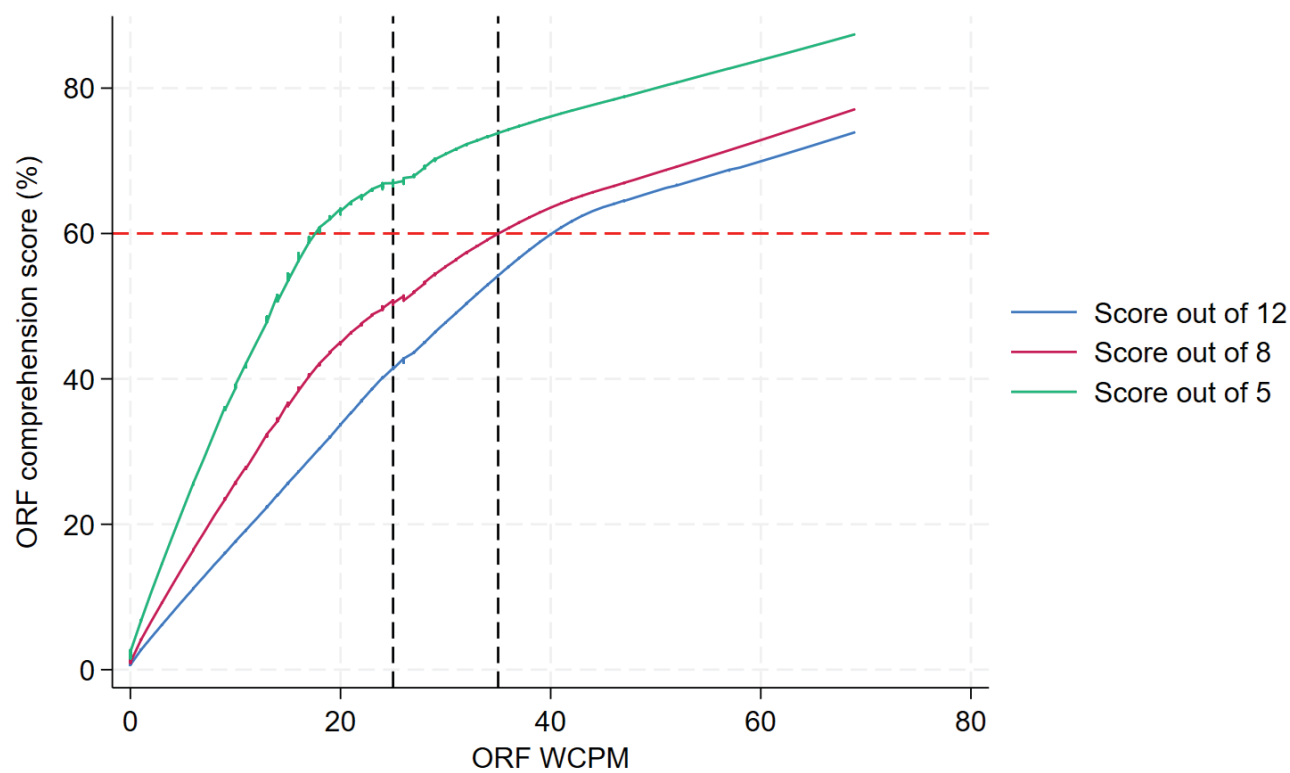
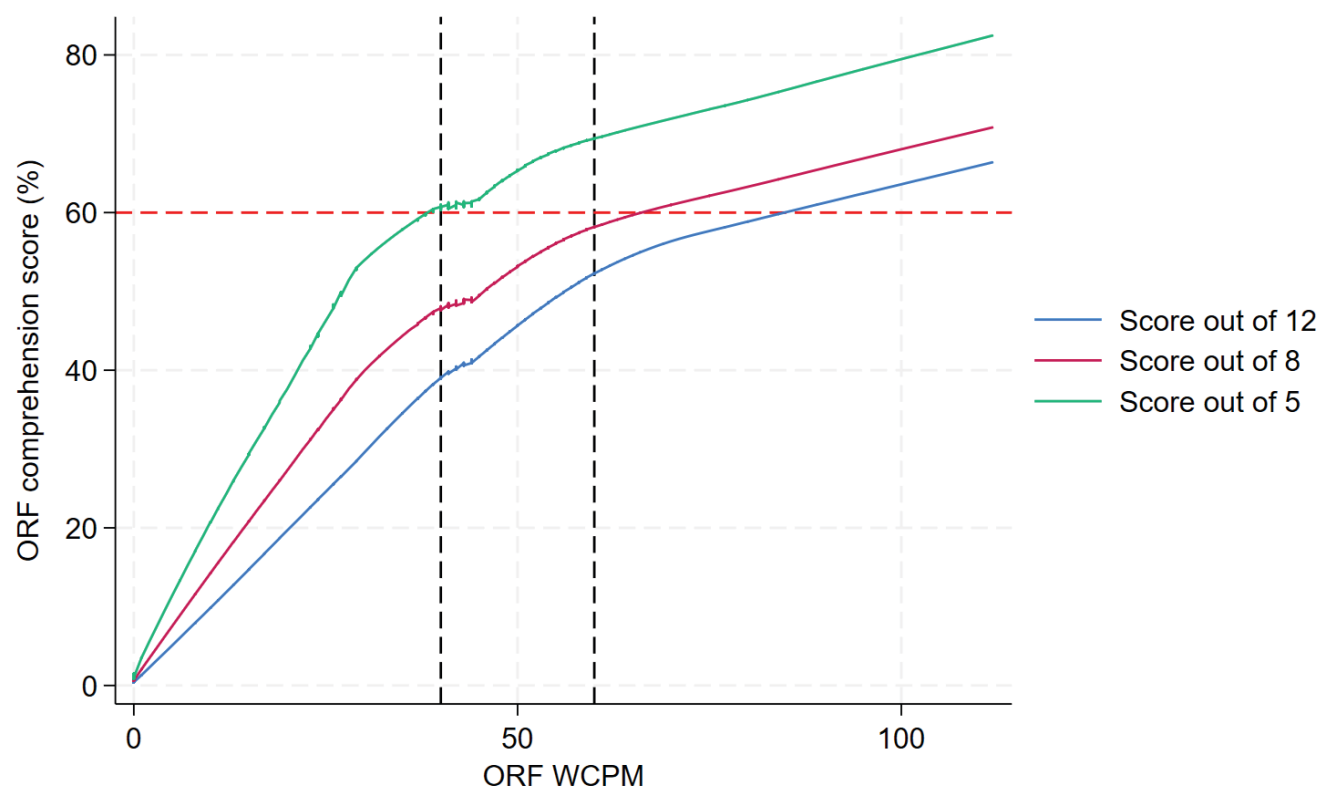


Figure 6.6.8: Relationship between ORF and ORF comprehension for SeSesotho-Tswana languages (Grade 3)



Oral reading fluency and written comprehension

Table 6.7.3 confirms that there is also a strong relationship between oral reading fluency and written comprehension. Amongst children who scored 0 on oral reading fluency, the average written comprehension score was 12%. This suggests that some children who scored 0 may in fact have been able to read to a very limited extent and may have underperformed in the orally administered task. At the same time, it confirms that low performance on oral reading fluency is associated with extremely low comprehension outcomes.

As learners move up through the categories of oral reading fluency, their average written comprehension scores increase. For those learners meeting the benchmark, but not far exceeding it, the average comprehension score in the written assessment was 45%. For those exceeding the benchmark, the average score was 62%.

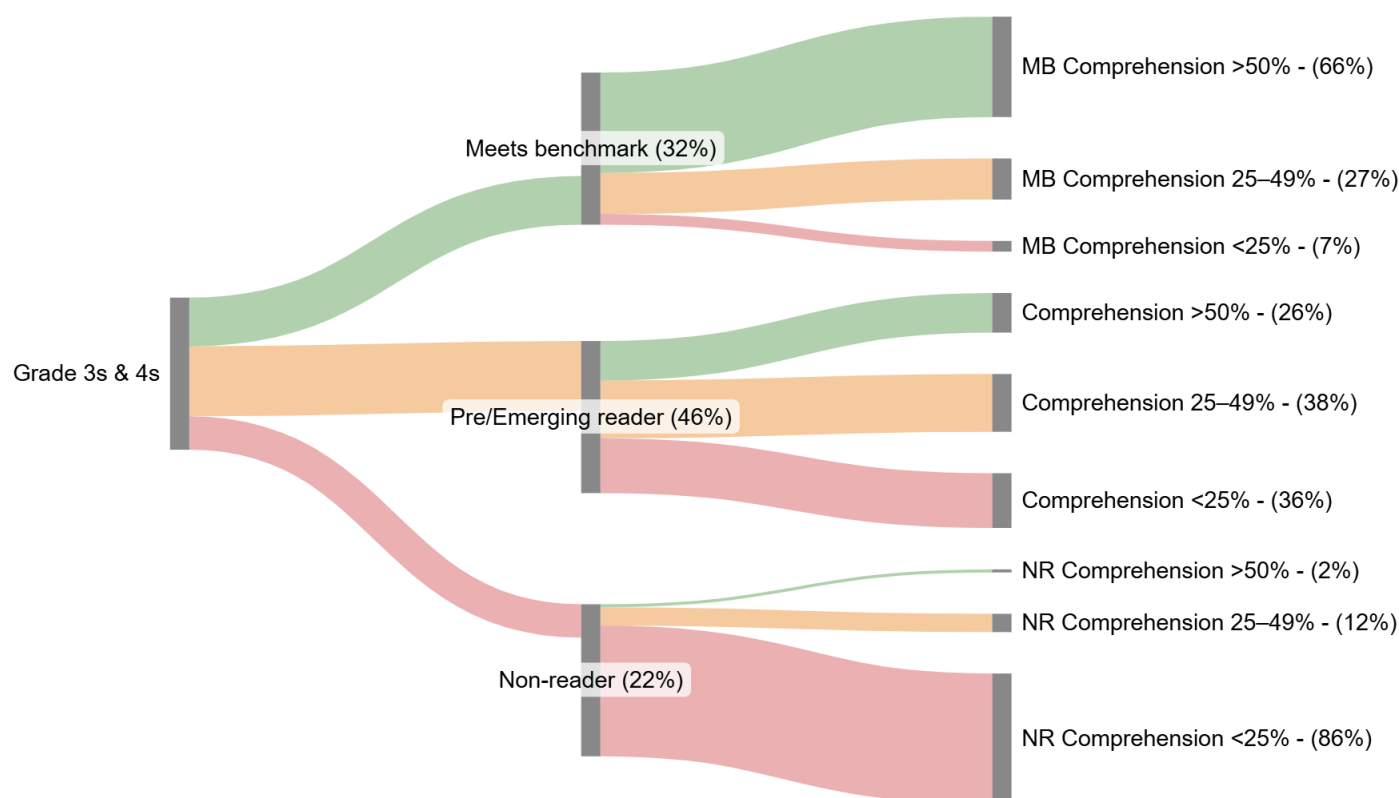
Table 6.7.3: Average written comprehension scores by category of Oral Reading Fluency

	Grade 3	Grade 4	Total
Zero Score	11%	14%	12%
	1122	855	1977
Non-Reader	11%	15%	13%
	704	505	1209
Pre-reader	19%	23%	21%
	1042	843	1885
Emerging reader	35%	43%	40%
	1927	2007	3934
Meets benchmark	41%	48%	45%
	326	502	828
Exceeds benchmark	59%	66%	62%
	1282	1616	2898
Total	33%	42%	37%
	6403	6328	12731



Figure 6.7.9 presents what is known as a Sankey diagram. This diagram shows the percentages of all Grade 3 and 4 learners who meet the benchmark, who are in a pre- or emerging reader phase, or who are non-readers. Each of these three categories is then split into another three categories based on their performance in written comprehension. For learners who met the benchmark in oral reading fluency, 66% also scored above 50% in written comprehension, while only 7% scored below 25%. The opposite pattern is evident for non-readers at the bottom of the diagram: 86% of non-readers scored below 25% in comprehension, and only 2% managed to achieve more than 50%. This diagram visually confirms the importance of meeting oral reading fluency benchmarks in order to go on to read with comprehension.

Figure 6.7.9: Relationship between ORF category and written comprehension



Semantics and comprehension

The written assessment for Grades 3 and 4 also included 10 items focusing on semantic knowledge. These items were not administered to English- and Afrikaans-speaking learners, as they were included specifically to reflect a particular interest in morphological awareness as a lens for understanding reading development in African languages. Five items focused on knowledge of synonyms and five items on knowledge of antonyms.

Theoretically, one expects—and earlier analysis in this report has already shown—that oral reading fluency (or decoding skills more generally) and oral language skills such as vocabulary or morphological awareness are largely separate factors that simultaneously work together to produce reading with comprehension. An important question, therefore, is which of these distinct skills presents the more binding constraint to reading with comprehension in the South African context. It has already been shown that most children do not reach oral reading fluency benchmarks, especially in African languages, suggesting that this may be a major constraint in the current context. On the other hand, as Figure 6.7.10 shows, the spread of learner achievement was somewhat better for semantic knowledge. This suggests that many African language children bring relatively good vocabulary and morphological awareness to their reading development. This confirms why it is important to learn to read in the language one understands best.

Figures 6.7.11 and 6.7.12 further explore the constraints to comprehension presented by oral reading fluency and semantics. Figure 6.7.11 shows the relationship between oral reading fluency and comprehension for two different groups of children: first, those with strong semantic knowledge; and second, those with weak semantic knowledge. At any given level of oral reading fluency, having strong semantic knowledge is associated with higher comprehension scores. Yet even for those with weak semantic knowledge, improvements in oral reading fluency are still associated with improvements in written comprehension.

Figure 6.7.12 shows the relationship in the opposite direction: between semantic knowledge and comprehension for two groups of readers based on oral reading fluency. The first is a group who meet the oral reading fluency benchmark, and the second is the group of non-readers falling into the bottom two oral reading fluency categories. At any given level of semantic awareness, having strong oral reading fluency is associated with a large jump in comprehension. What is also noteworthy is that improvements in semantics among those who cannot read fluently are not associated with strong improvements in comprehension. In other words, even for children with 100% semantic awareness, their expected comprehension score is only about 20% if they cannot read fluently.

Taken together, these graphs suggest two things: first, that semantic knowledge is relatively good compared to oral reading fluency; and second, that oral reading fluency presents a more binding constraint to reading with comprehension than a lack of semantic knowledge. The implications for teaching in Grades 1 to 3 are clear: in the current situation for African languages, improving the fundamental decoding skills of reading is critical for improving reading with comprehension.

Figure 6.7.10: Histogram of semantic knowledge by grade

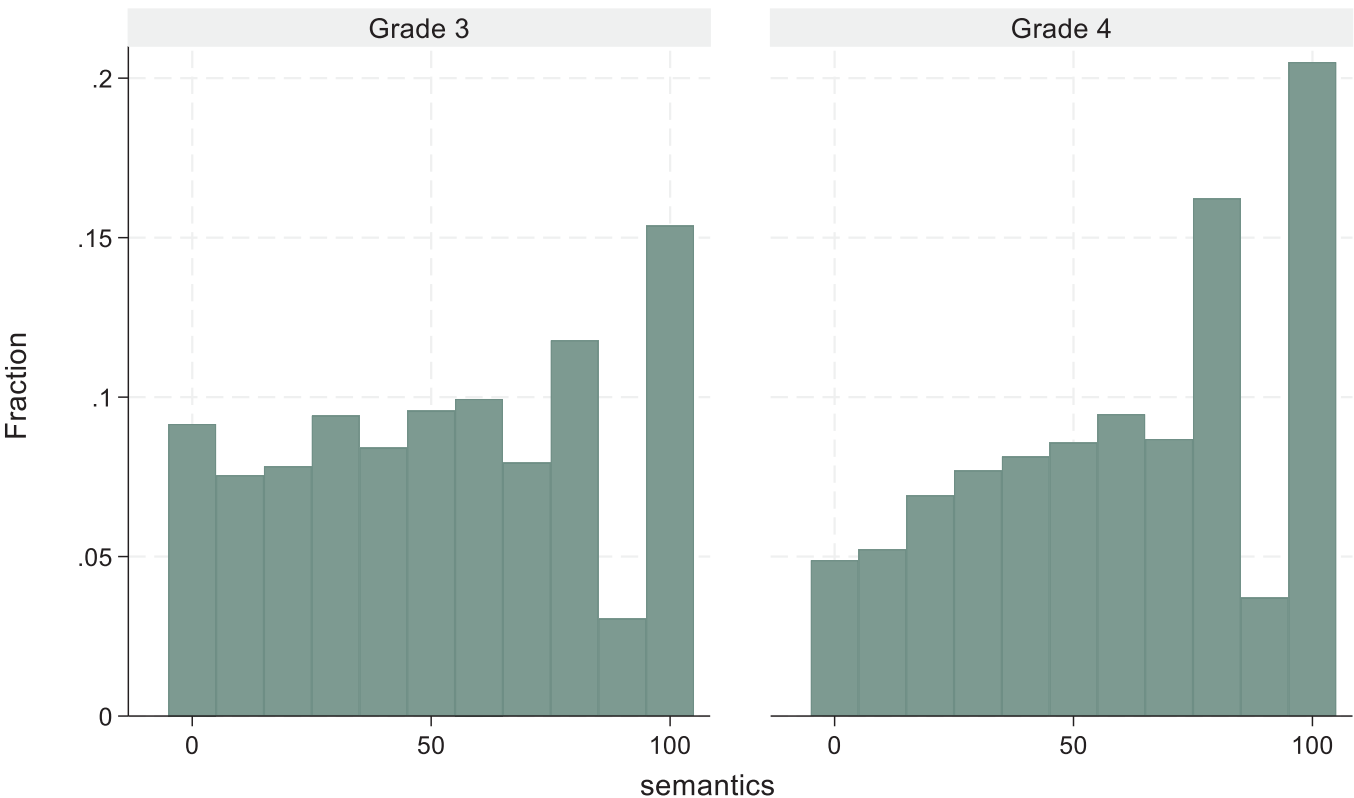
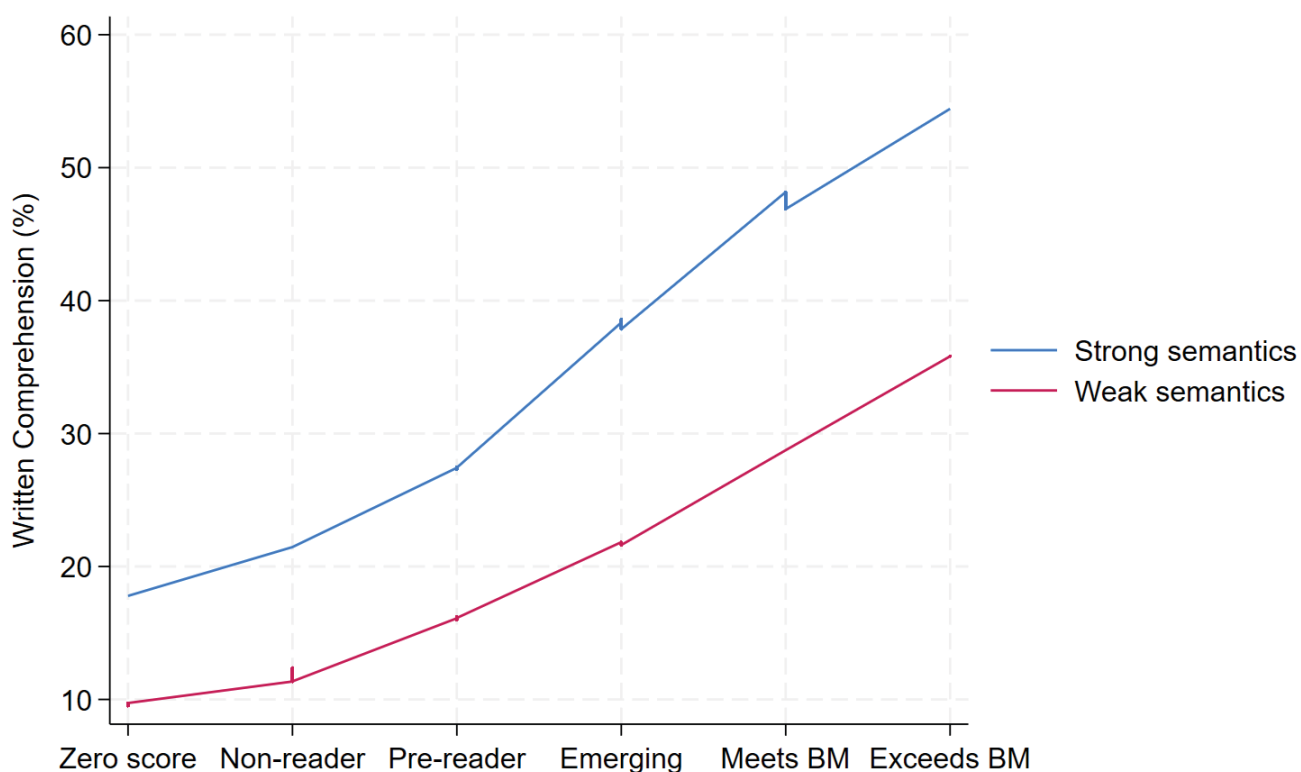
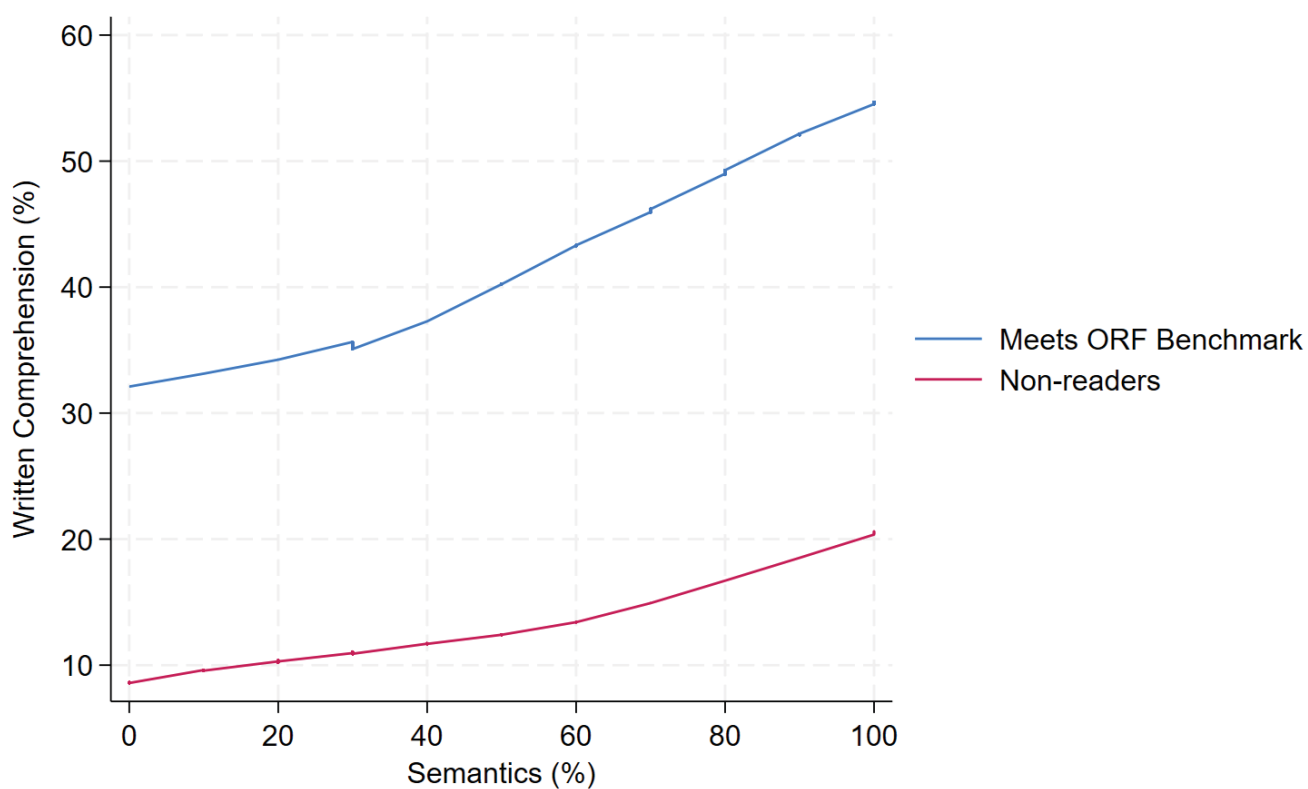


Figure 6.7.11: Relationship between ORF and comprehension if semantics is strong/weak



Note: In this graph, “strong semantics” refers to those scoring at least 80% and “weak semantics” refers to those scoring 30% or less.

Figure 6.7.12: Relationship between semantic knowledge and comprehension if ORF is strong/weak



Note: In this graph, “non-readers” refers to those in the bottom two categories of ORF.

Decomposing the contributions of foundational skills predictive of comprehension

To further explore the relative contribution of foundational reading skills towards written comprehension, a Shapley decomposition was conducted for Grade 3 learners (since this was the only grade tested on both letter sound recognition and semantics). The Shapley approach is a relative-importance method that decomposes a regression model's R-squared statistic into contributions attributable to each predictor. Since reading skills are highly interrelated, it is not straightforward to decide how much each one "matters" just by looking at regression coefficients. The Shapley method deals with this by averaging over all possible orders in which variables could enter the model and then assigning each predictor its share of the explained variance. The percentages reported then reflect the proportion of the variance in written comprehension attributable to each skill, after taking account of overlap among them. Separate models were run for the different language groups, since word lengths differ so much across them, something that would interfere with the decomposition. The results are shown in Table 6.7.4.

Table 6.7.4: Results from a Shapley decomposition

	Nguni Languages	Sesotho-Setswana	Xitsonga and Tshivenda
Factor	Contribution	Contribution	Contribution
Letter sound recognition	8%	9%	9%
Isolated word reading	37%	36%	30%
Oral Reading Fluency	40%	37%	40%
Semantics	15%	18%	21%
Total R-squared	0.46	0.36	0.45

This decomposition was done after a simple OLS regression predicting written comprehension based on the four variables in Table 6.7.4. The R-squared statistics for the models ranged between 0.36 and 0.46, indicating that the set of foundational skills included in the models accounted for about 36-46% of the variance in written comprehension among Grade 3 learners.

Isolated word reading (words read correctly per minute) and Oral reading fluency were the most powerful predictors, highlighting that children's ability to decode and recognise words efficiently is the strongest driver of their success on the written comprehension measure. Letter-sound recognition explains less than 10% of the variation in written comprehension. This does not mean that LSK is unimportant; rather, by Grade 3 its effect is largely mediated through word and passage reading skills. Once those later skills are included, the unique contribution of letter knowledge to written comprehension is relatively small.

Semantic knowledge (vocabulary/meaning-related skills) contributes between 15 to 21% to written comprehension. This underlines the importance of oral language and broader knowledge of word meanings in supporting comprehension over and above decoding.

Taken together, these results reinforce a common developmental sequence: early foundational skills (letters) feed into word-level decoding fluency, which in turn strongly predicts comprehension, while semantic knowledge and passage-level fluency both add substantial independent explanatory power. In practical terms, this implies that comprehension outcomes at Grade 3 depend most on developing fluency in building and reading words, complemented by oral language development and semantic awareness.

Relationship between Home Language and EFAL

Most South African children—apart from Afrikaans- and English-speaking children—primarily learn to read through home language literacy in Grades 1 to 3, with English as a First Additional Language introduced alongside it. In Grade 4, most children face a challenging transition when English becomes the language of learning and teaching, although the rollout of mother-tongue-based bilingual education is set to extend the use of mother tongue beyond the foundation phase. It is therefore both relevant and important to explore how this relationship develops during the foundation phase, and the FUNS dataset provides a valuable window into this.

Correlations across tasks

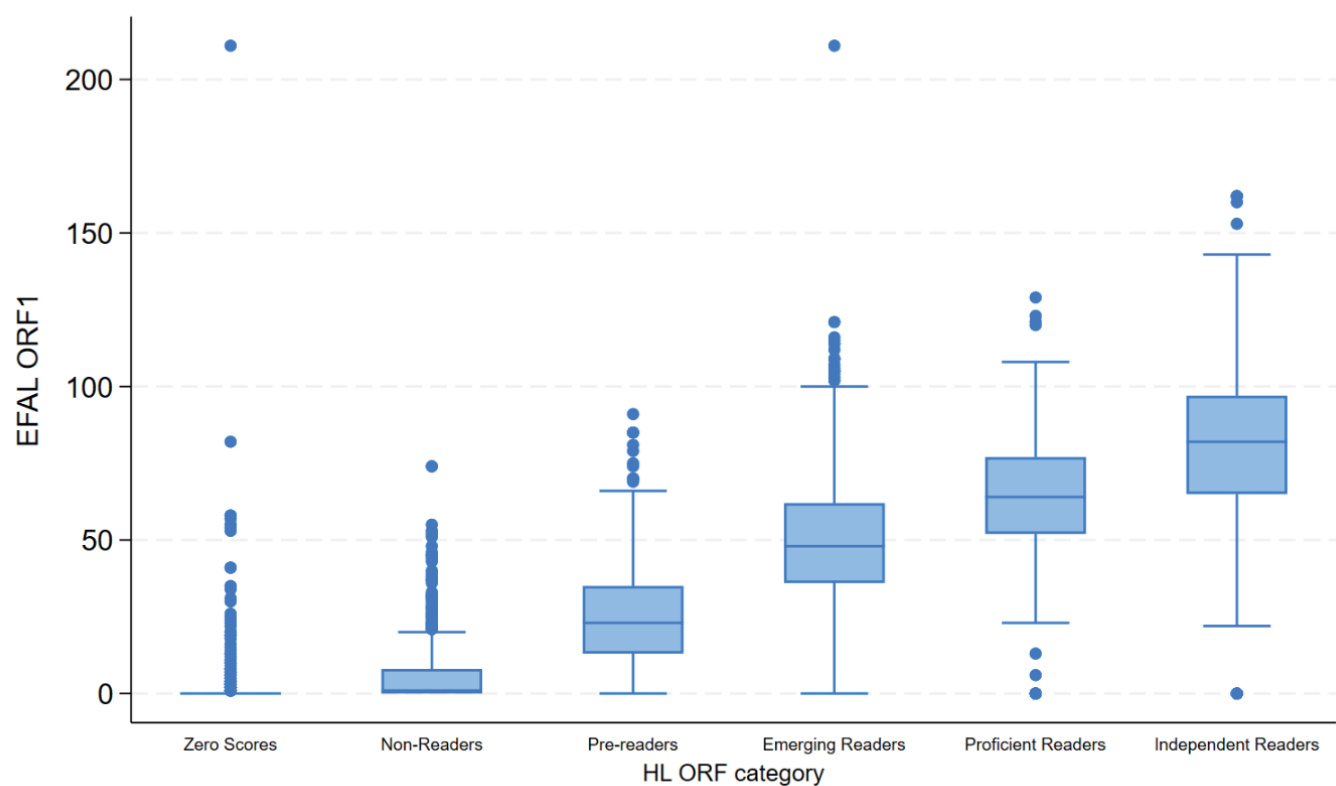
Table 6.8.1 shows pairwise correlations across a selection of EFAL and home language reading tasks. In general, there are very high correlations between home language and EFAL tasks. Isolated word reading has a correlation coefficient of 0.82 in HL and EFAL. Similarly, the correlation between home language oral reading fluency and EFAL oral reading fluency is 0.83. Both correlations reflect a particularly strong relationship across languages in these domains and points to the significant amount of skill transfer that occurs between the home language, where learners are initially taught the skills of reading, and EFAL. The correlation between home language comprehension and EFAL comprehension is not quite as strong, with a correlation coefficient of 0.59. The fact that this correlation is lower may reflect the importance of other factors—such as oral language skills, vocabulary, and semantic knowledge—that are needed in addition to decoding skills in order to read with comprehension in a language.

Table 6.8.1: Pairwise correlations across EFAL and Home Language tasks

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) HL Words	1.00					
(2) EFAL Words	0.82	1.00				
(3) HL ORF1	0.82	0.82	1.00			
(4) EFAL ORF1	0.80	0.92	0.83	1.00		
(5) HL Comprehension1	0.72	0.68	0.74	0.72	1.00	
(6) EFAL Comprehension1	0.65	0.70	0.63	0.68	0.59	1.00
Total R-squared	0.46	0.36	0.45			

Figure 6.8.1 shows the relationship between oral reading fluency in the home language and in English as a first additional language. The figure confirms the high correlation observed in Table 1. For children who are non-readers in their home language, this virtually guarantees that they will also be unable to read in English as an additional language. Conversely, for those who meet the home-language benchmarks, the distribution of oral reading fluency in English is similarly strong.

Figure 6.8.1: Grade 3 HL ORF as a predictor of EFAL ORF (box plot)



Note: English home language learners were excluded from this graph.

Figures 6.8.2 and 6.8.3 depict the same relationship between HL ORF and EFAL ORF using Lowess Smoothing lines. Once again, the strong relationship between the two is clear, across all languages shown in the figures.

Figure 6.8.2: Grade 3 HL ORF as a predictor of EFAL ORF (Nguni languages)

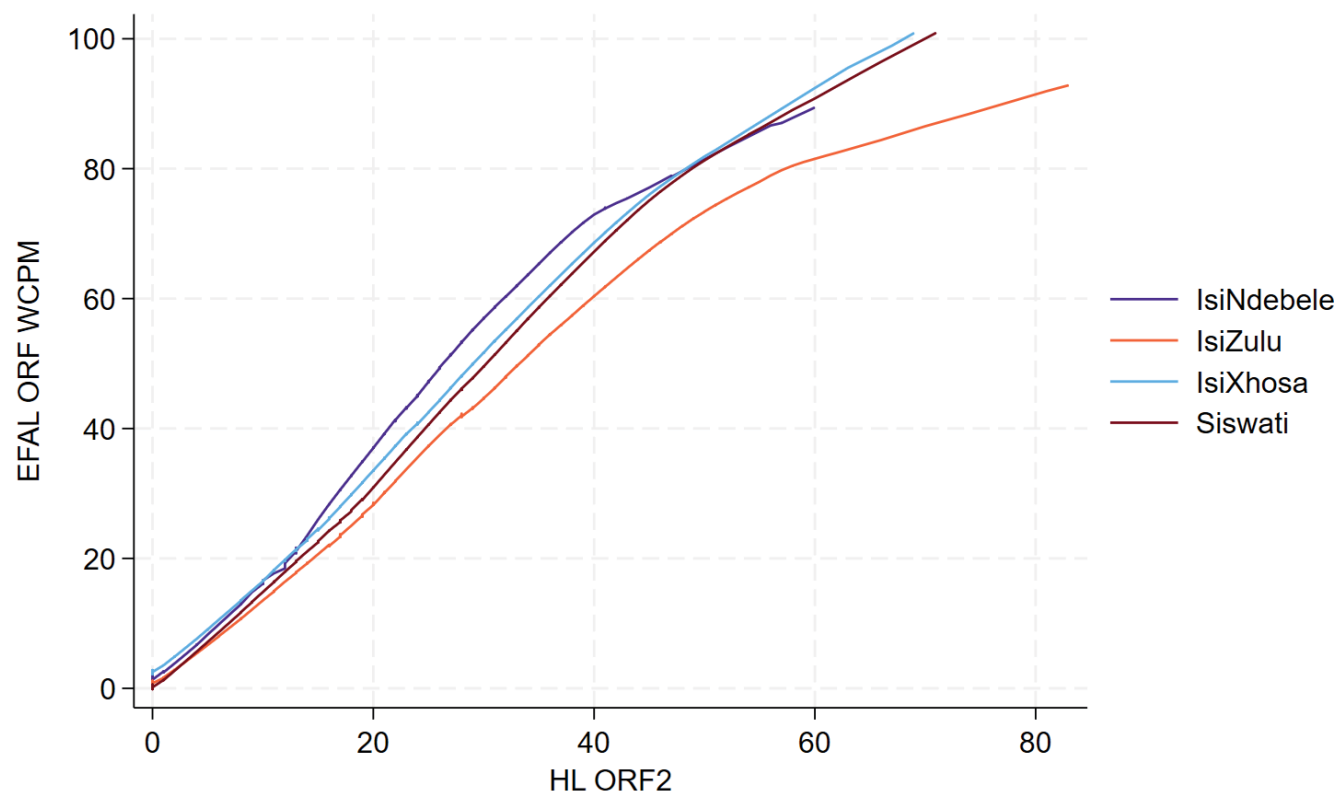


Figure 6.8.3: Grade 3 HL ORF as a predictor of EFAL ORF (Sesotho-Tswana languages)

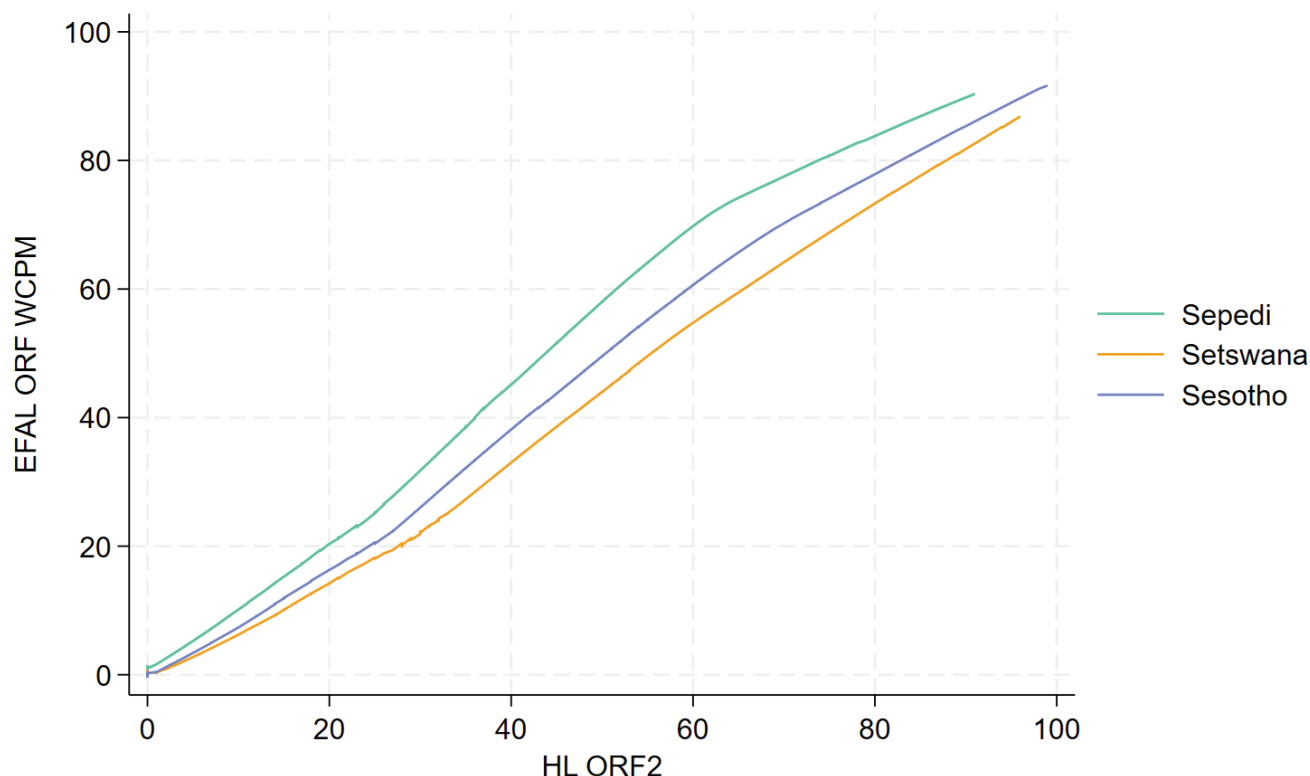
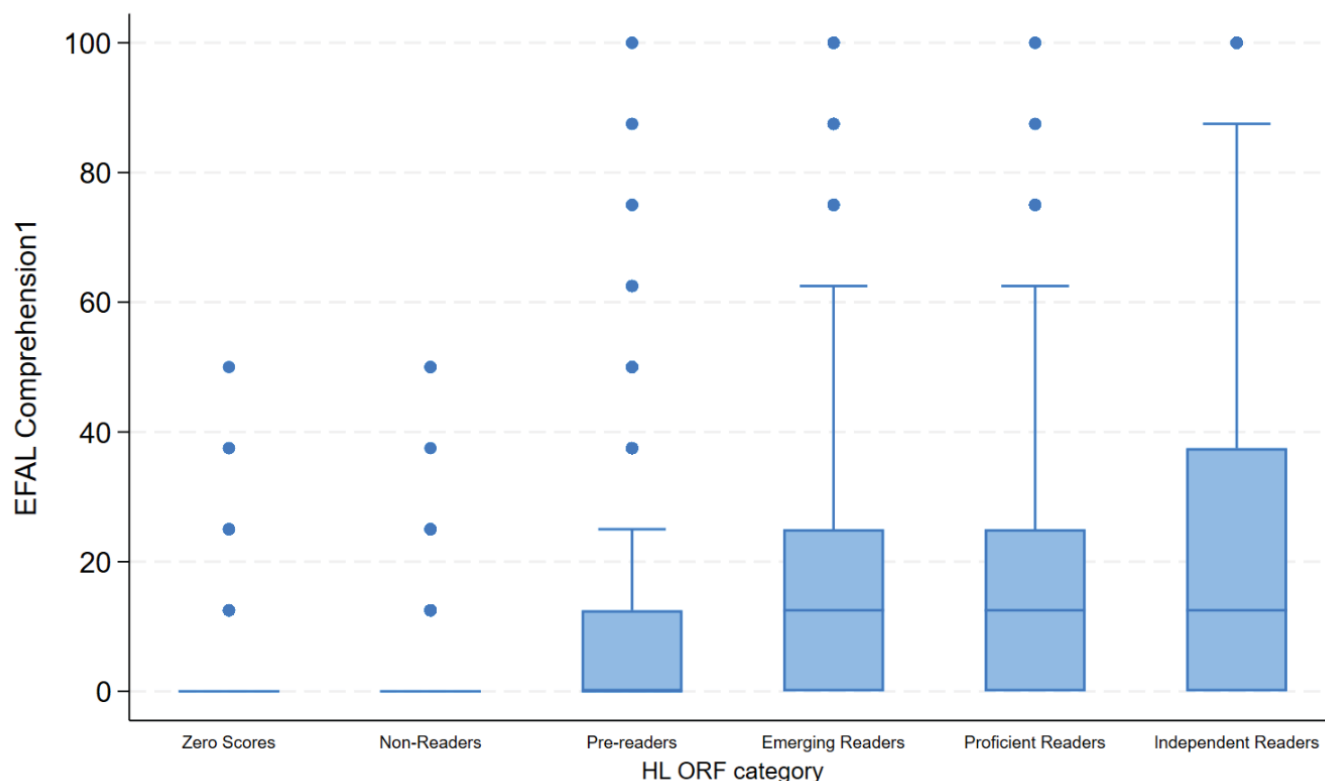


Figure 6.8.4 shows the relationship between HL ORF and comprehension in EFAL. As one would expect given the strong relationship between HL ORF and EFAL ORF, those learners not yet able to decode fluently in their home language almost all score zero on EFAL comprehension. However, there is a spread of achievement in EFAL comprehension for those children who reach HL reading benchmarks. While some are beginning to read in EFAL with comprehension, many learners who reached HL benchmarks are scoring zero or near zero. This may indicate that reading fluently in home language is a necessary but not sufficient condition for reading with comprehension in an additional language. On the other hand, it should also be noted that the EFAL comprehension tasks proved to be particularly difficult – as the next figures show.

Figure 6.8.4: Grade 3 HL ORF as a predictor of EFAL comprehension



Note: English home language learners were excluded from this graph.

The difficulty of the grade 3 EFAL comprehension task is clear to see in Figure 6.8.5, which compares achievement in HL comprehension and EFAL comprehension. In most languages, the majority of learners scored zero for EFAL comprehension. More surprisingly, English HL learners performed worse on the EFAL comprehension test than they did on their HL test. Figure 6.8.6 shows that the same pattern occurred for the grade 4 EFAL test, which was also clearly even more difficult than the HL English assessment.

Figure 6.8.5: Comprehension achievement in HL and EFAL by learner language (Grade 3)

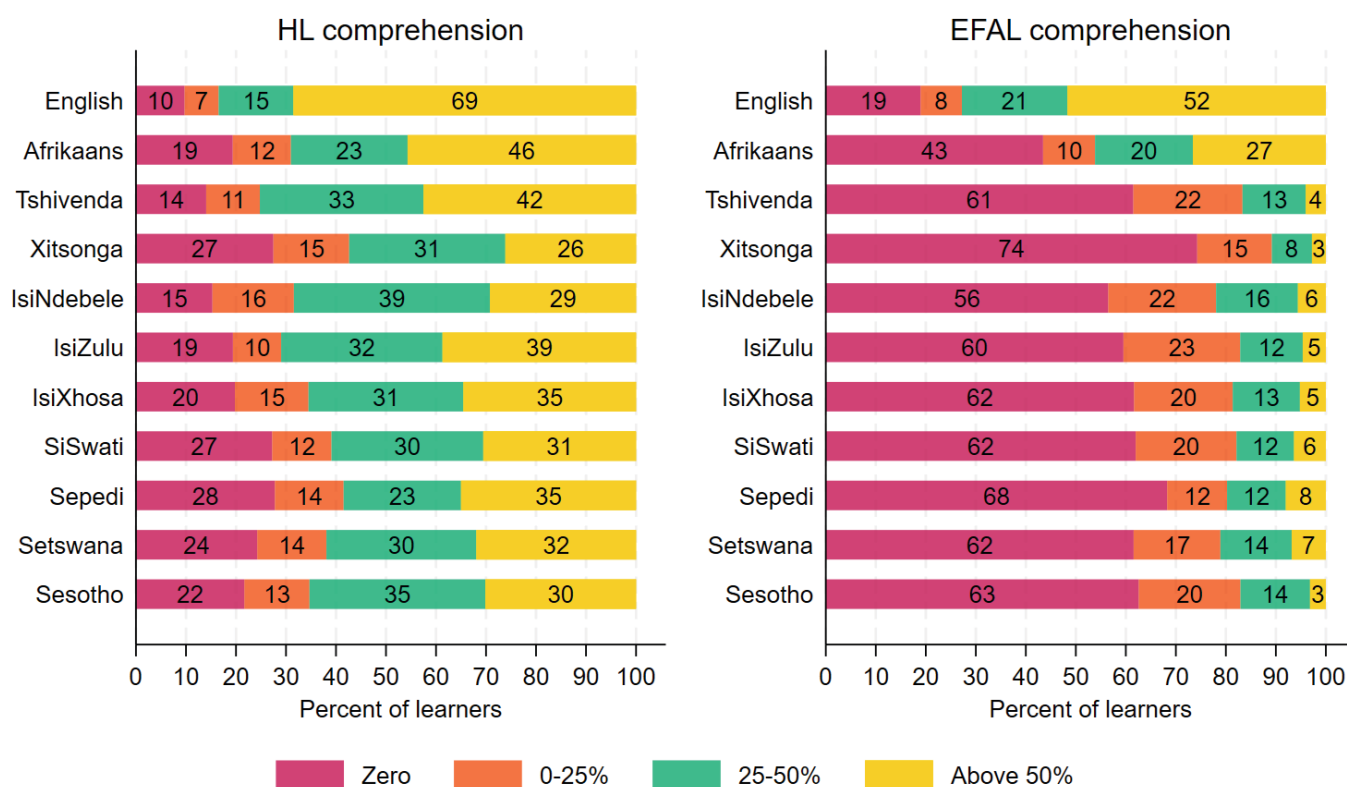
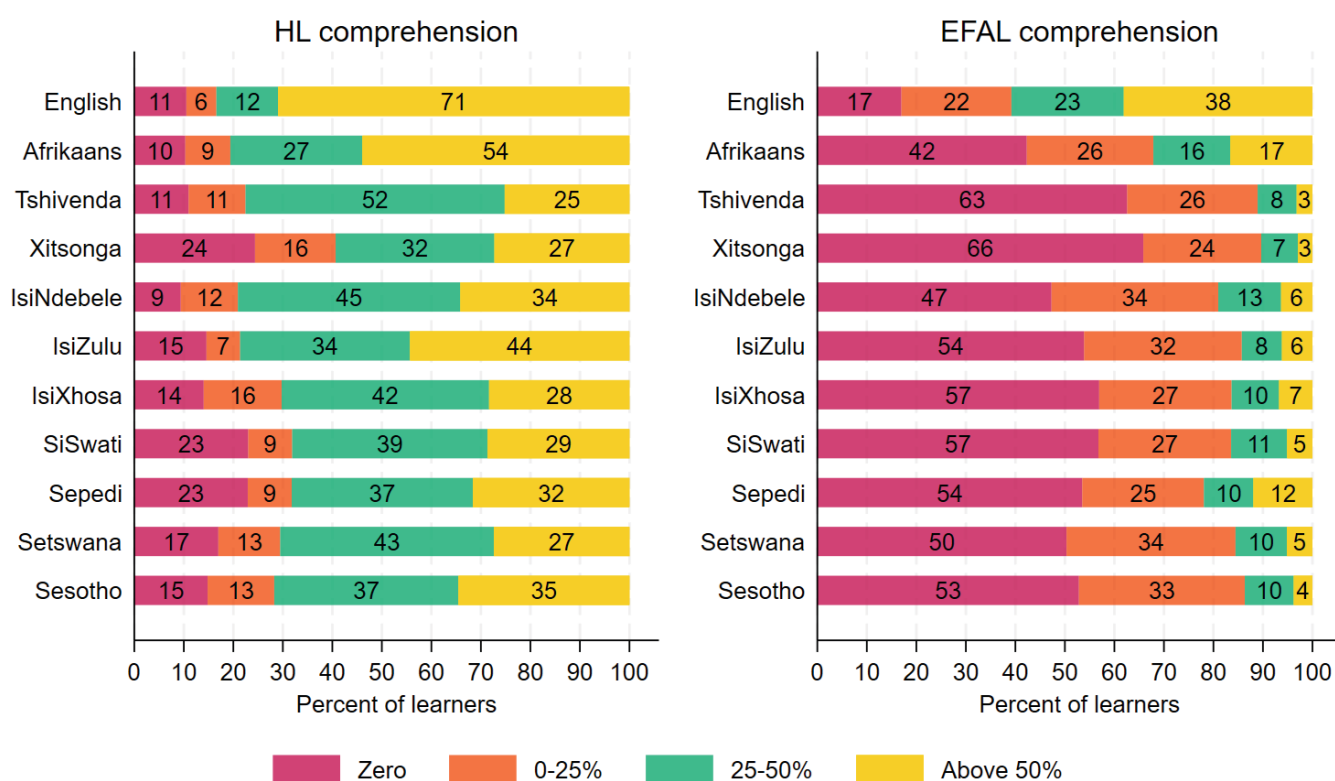
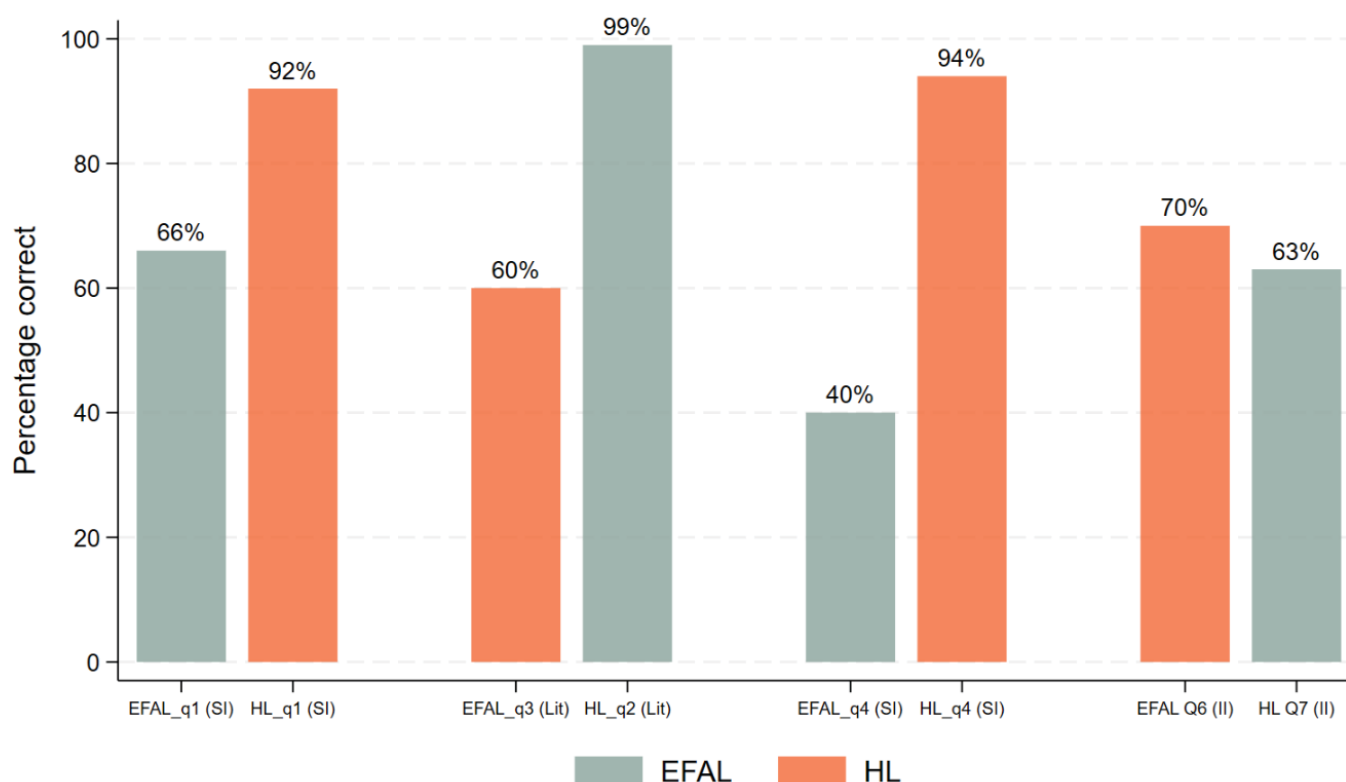


Figure 6.8.6: Comprehension achievement in HL and EFAL by learner language (Grade 4)



Finally, Figure 6.8.7 shows the greater difficulty of the EFAL comprehension test through comparing item performance for HL English learners across the HL and EFAL tests. In the graph, the percentages correct are shown for Grade 4 English learners who responded to both items within each pair (to ensure that item difficulties are being compared using the same sample of learners). The four pairs of items here were chosen based on being the same item type (e.g. Literal) and appearing at a similar point in the assessment. In only one of these item pairs did English HL learners perform better in the HL assessment. Future rounds of FUNS will need to adjust the relative difficulty of the EFAL assessment.

Figure 6.8.7: Performance of Gr4 English learners on “comparable” items in the HL and EFAL tests



Learners assessed- or not assessed- in their own home language

The study’s sample design selected schools based on their language of learning and teaching (LoLT), as recorded in the Department of Basic Education’s administrative data. Within these schools—and specifically within classes using a particular LoLT—learners were then randomly sampled and assessed in that same language.

However, not all learners share the same home language as the language used for instruction and the home language literacy subject in their class. As part of the survey, learners were asked to identify their home language. This information enables analysis of the extent of mismatches between a learner’s home language and the language in which they were assessed. Such mismatches are not only relevant for interpreting the survey data but also have broader policy significance for understanding the correspondence between the languages children speak at home and those used for instruction in schools. It also allows for analysis of reading outcomes according to whether learners were assessed in their own home language or not.

Figure 6.9.1 shows the percentage of learners who were assessed in their own home language across the different assessment languages. Overall, 87% of learners were assessed in their own home language. However, this percentage was substantially lower for learners assessed in English. This reflects the widespread pattern that many children whose home language is not English nonetheless attend schools where English is used as the LoLT in the foundation phase. In contrast, in schools using any of the other South African languages as the LoLT, the vast majority of learners also speak the same language at home.

Figure 6.9.2 reverses the analysis by showing the percentage of learners assessed in their own home language according to their home language. Here, 95% of children whose home language is English were also assessed in English, illustrating the opposite situation: very few English-speaking children attend schools with a different LoLT. On the other hand, children whose home language is isiNdebele or Sesotho were least likely to be assessed in their own home language. Many of these learners would have been assessed in English, as Figure 1 also indicated.

Figure 6.9.3 shows the percentage of learners assessed in their own home language across provinces. The lowest percentage is observed in Gauteng. This reflects both the province's relatively affluent context—where many middle-class children whose home language is not English attend English-medium schools—and its high linguistic diversity. In such contexts, schools often adopt English as the LoLT in the foundation phase. Even in schools that do use an African language as the LoLT, classrooms in Gauteng typically include learners from multiple home-language backgrounds.

Finally, Figure 6.9.4 highlights the socio-economic dimension of these patterns by showing the percentage of learners assessed in their own home language across the five school poverty quintiles. While almost 90% of children in Quintile 1–3 schools were assessed in their home language, this percentage drops sharply among learners in more affluent schools—only 44% in Quintile 5 schools and relatively low levels in Quintile 4 schools as well. This again reflects the pattern that more affluent, urban learners whose home language is not English often attend schools where English is the language of instruction in the foundation phase.

Figure 6.9.1: Percentage of learners assessed in their own HL, by language of assessment

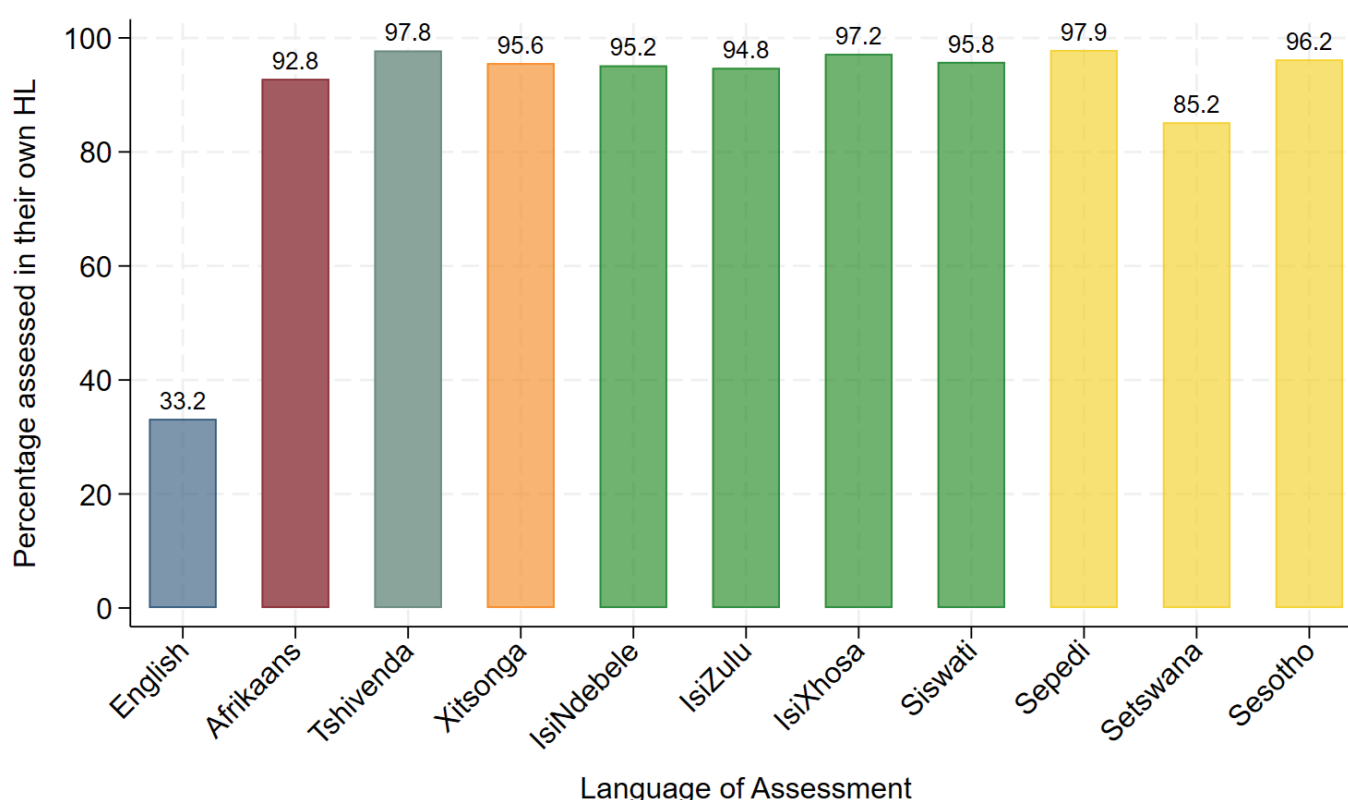


Figure 6.9.2: Percentage of learners assessed in their own HL, by their HL

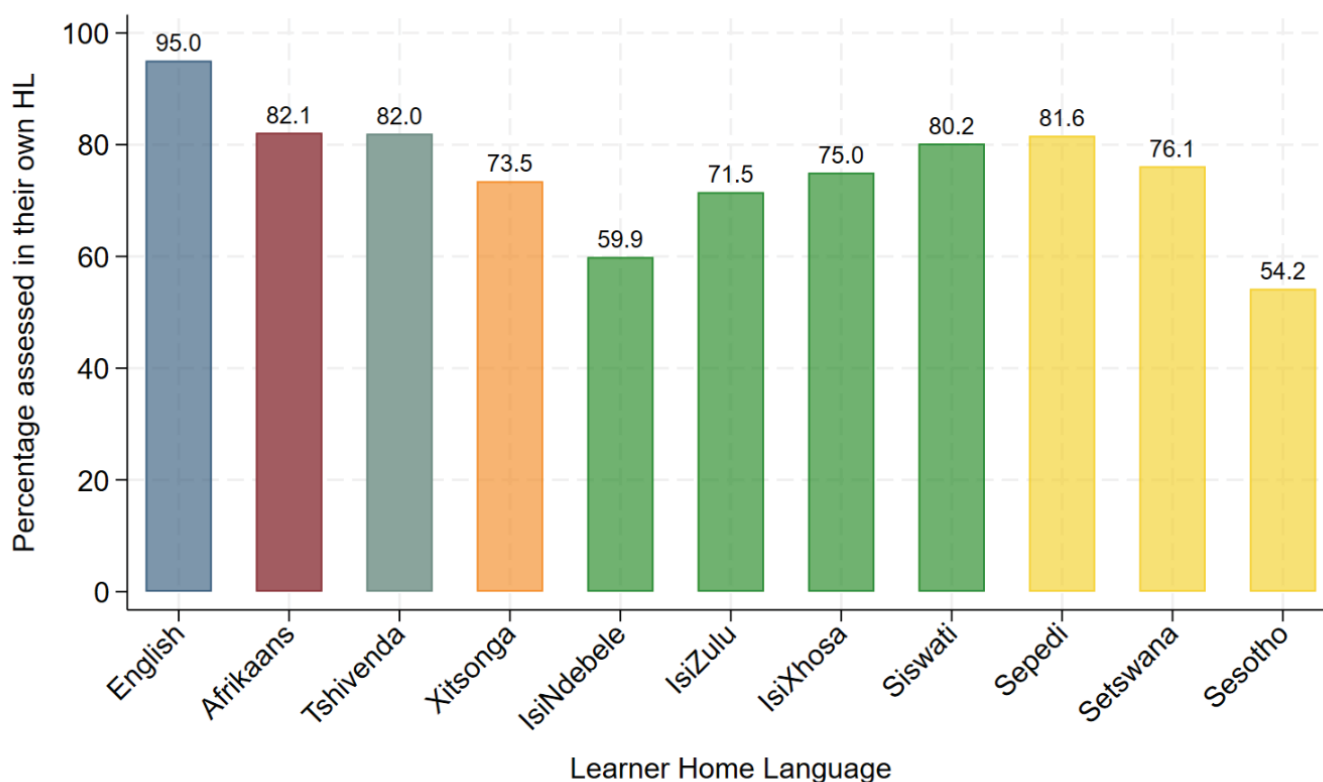


Figure 6.9.3: Percentage of learners assessed in their own HL, by province

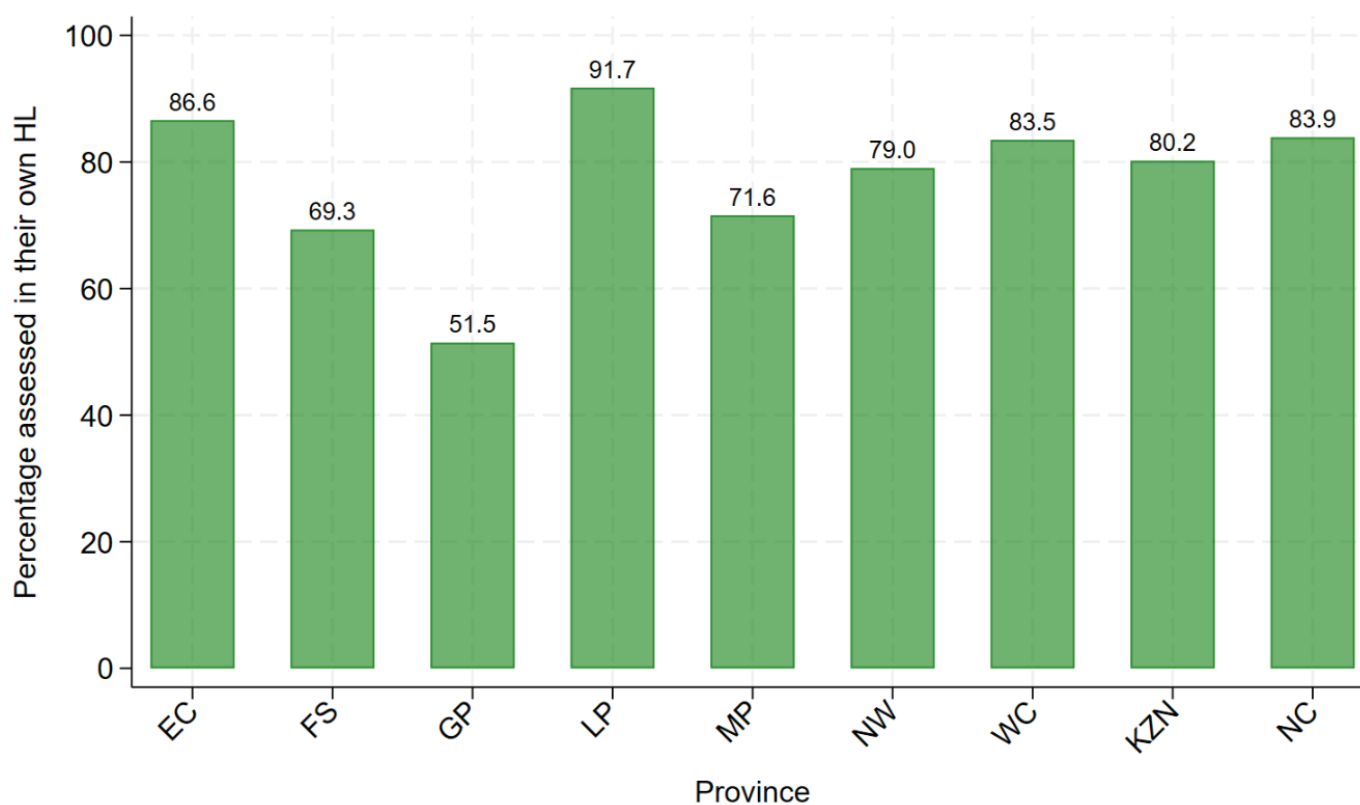
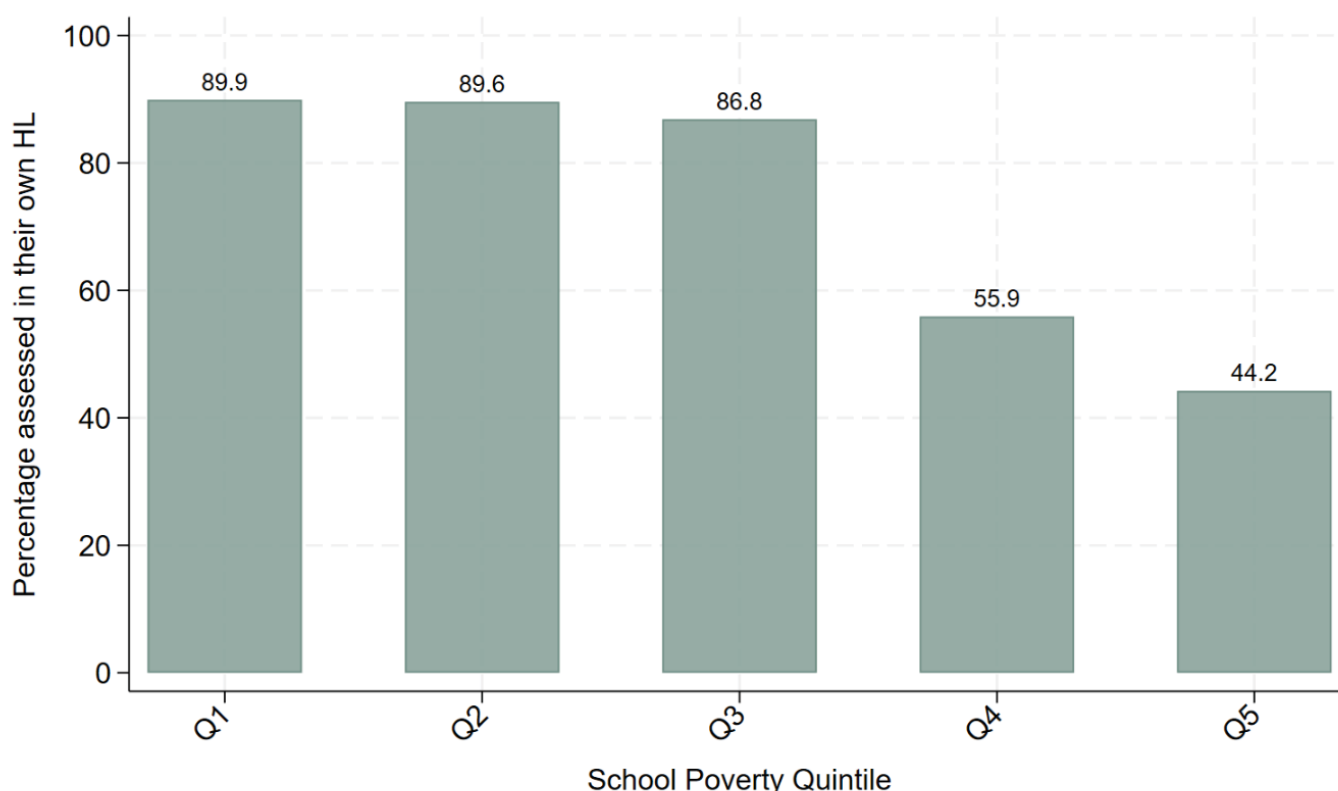


Figure 6.9.4: Percentage of learners assessed in their own HL, by quintile



These patterns create a somewhat complex relationship between being assessed in one's home language and reading performance, as language alignment often coincides with broader socio-economic and contextual factors. In fact, learners who were assessed in a language different from their home language, on average, performed better than those assessed in their own home language. This should not be interpreted as evidence of a causal relationship suggesting that learning through a non-home language is somehow beneficial. Rather, it reflects underlying socio-economic differences: many of the learners who were not assessed in their home language tend to come from more affluent households, attend better-resourced schools, and consequently achieve stronger reading outcomes.

Figure 6.9.5 illustrates this pattern by showing the percentage of learners reaching the home-language reading benchmarks across all language groups, comparing those assessed in their home language to those assessed in a different language. With the exception of English—where very few children whose home language is English are assessed in another language—learners not assessed in their home language outperform those who were.

For example, Sepedi-speaking learners who were assessed in a language other than Sepedi are more likely to attend schools in Gauteng, be enrolled in Quintile 4 or 5 schools, and come from relatively affluent households. In contrast, Sepedi-speaking learners who were assessed in their own home language are typically in Quintile 1–3 schools located in more rural areas.

Similarly, Figure 6.9.6 shows the average comprehension scores for these same groups of learners. The pattern remains consistent: apart from Afrikaans- and English-speaking learners, those assessed in a language other than their home language tend to perform better in comprehension than those assessed in their home language.

While learning to read in the language one understands best is unquestionably important, this analysis highlights the powerful influence of socio-economic status on reading achievement and educational inequality in South Africa.

Figure 6.9.5: Percentage reaching HL benchmarks for those assessed- or not assessed- in their HL

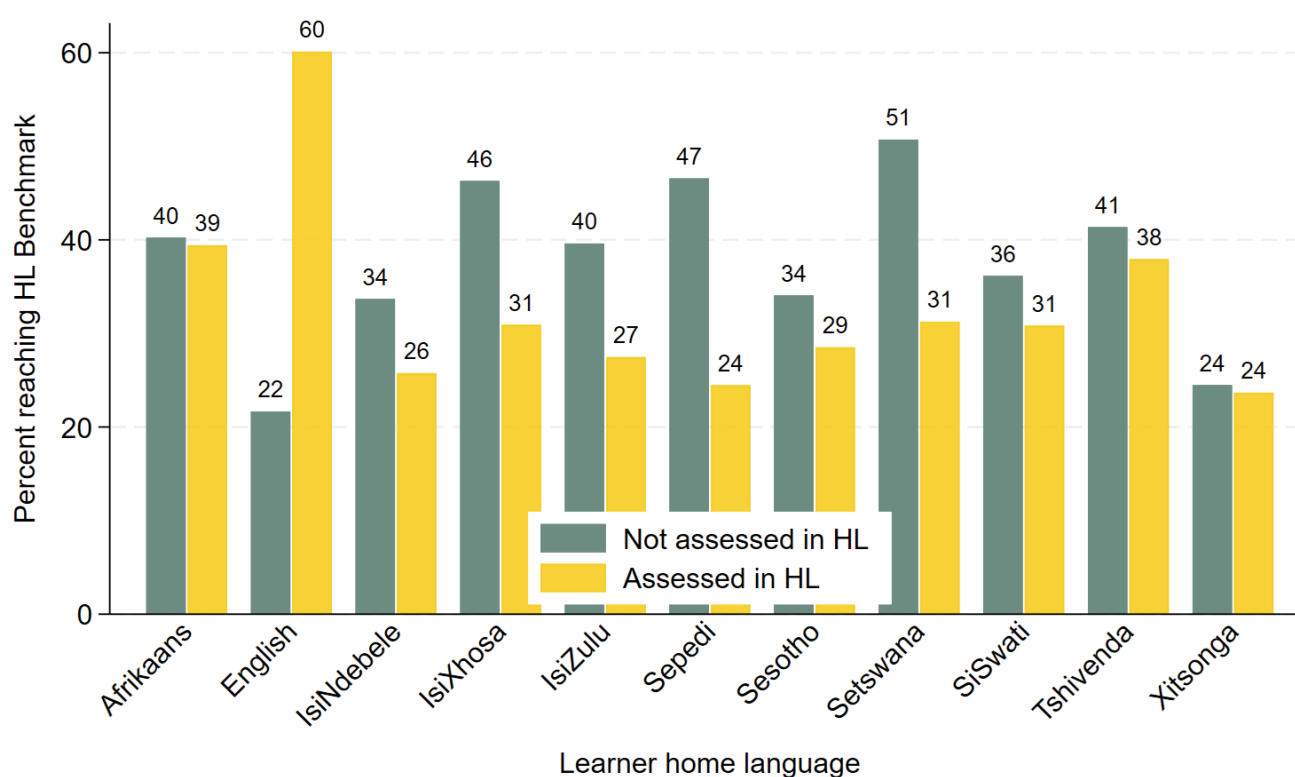
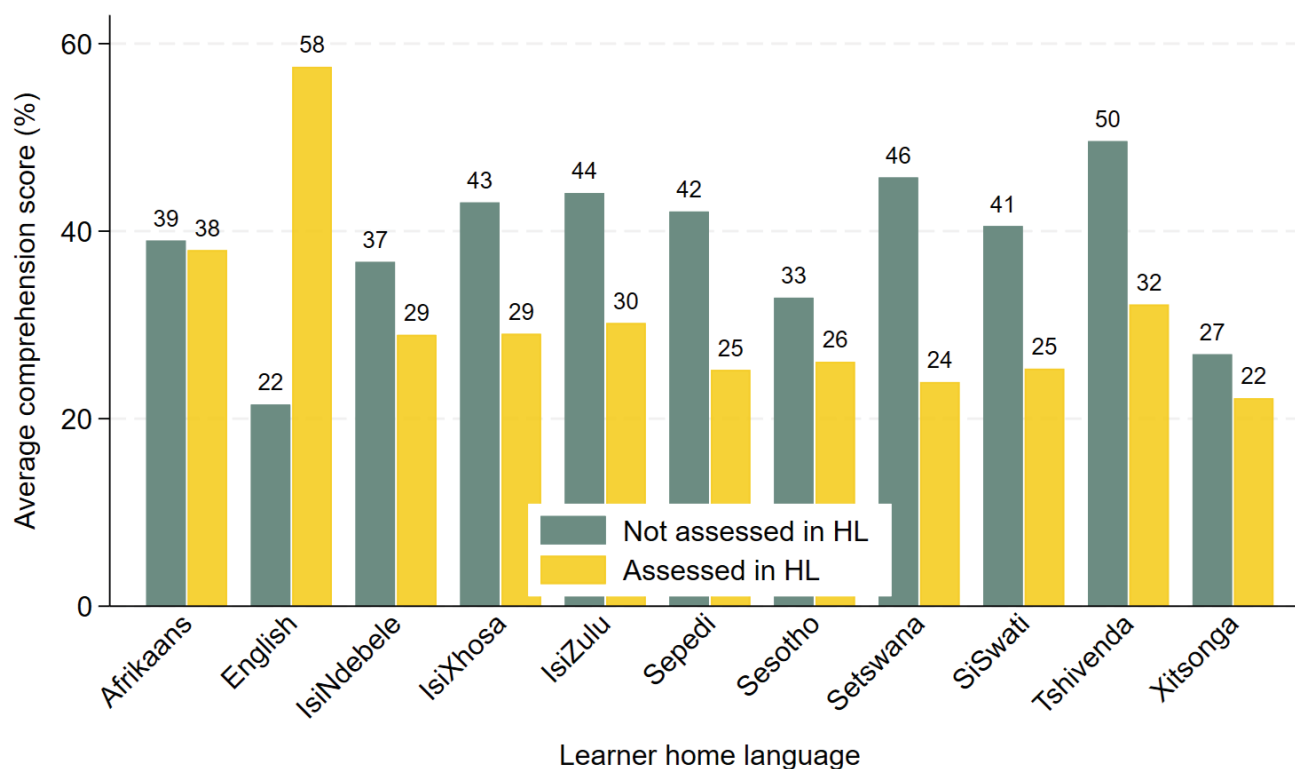


Figure 6.9.6: Average comprehension for those assessed- or not assessed- in their HL



Learning trajectories in reading outcomes

One of the advantageous design features of FUNS is that it included some assessment tasks that were common (or very similar) across grades. For example, all grades were assessed on isolated word reading using the same protocols, though the word difficulty increased with each grade. The assessment of letter sound recognition was identical in each grade. Two ORF passages were administered in each grade, one of which was also administered in the grade just beneath. This allows for some analysis of learning progression over the course of a year.

Figure 6.10.1 shows the evolution of letter sound knowledge across grades 1 to 3 (grade 4 was not assessed on letter sound knowledge). In most language groups, there is a significant increase in letter sound knowledge between grade 1 and 2, but then a flattening off thereafter. In Xitsonga and English there is even a slight decline in correct letter sounds per minute. This may indicate that sounding out letters is an important skill to develop in grade 1, but thereafter learners become less familiar with pronouncing letter sounds individually as opposed to letter names or whole words. For this reason, letter sound knowledge was chosen as the metric for the grade 1 reading benchmark, but is less important to assess in higher grades.

Figure 6.10.1: Growth in letter-sound recognition

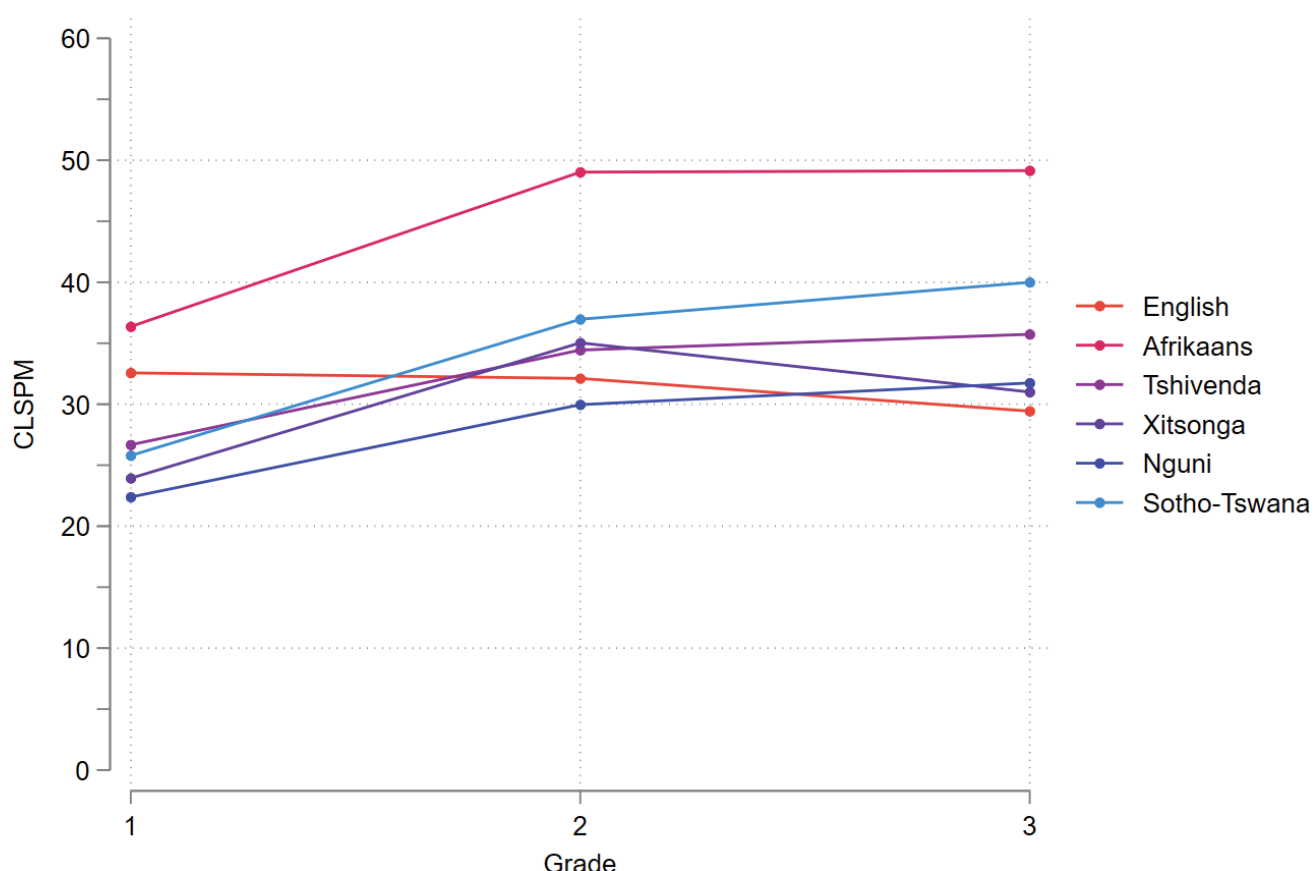


Figure 6.10.2 shows the growth in isolated word reading across the six language groups. There is clear evidence of progress from Grade 1 through to Grade 4, particularly in the case of English. However, it should be noted that the observed growth appears somewhat flatter than the true underlying progress, due to the fact that word difficulty increases with each successive grade.

It is also noteworthy that the numbers of correctly read isolated words per minute are remarkably similar across the Nguni and SeSesotho-Tswana language groups. This contrasts with the patterns observed in oral reading fluency. In oral reading fluency, because the SeSesotho-Tswana languages are highly disjunctive, a typical grade-level passage contains many short words, leading to higher word counts per minute. By contrast, the isolated word reading lists contained longer words and intentionally excluded the very short, frequently occurring words such as “o” and “a” in the SeSesotho-Tswana assessments.

Figure 6.10.2: Growth in isolated word reading

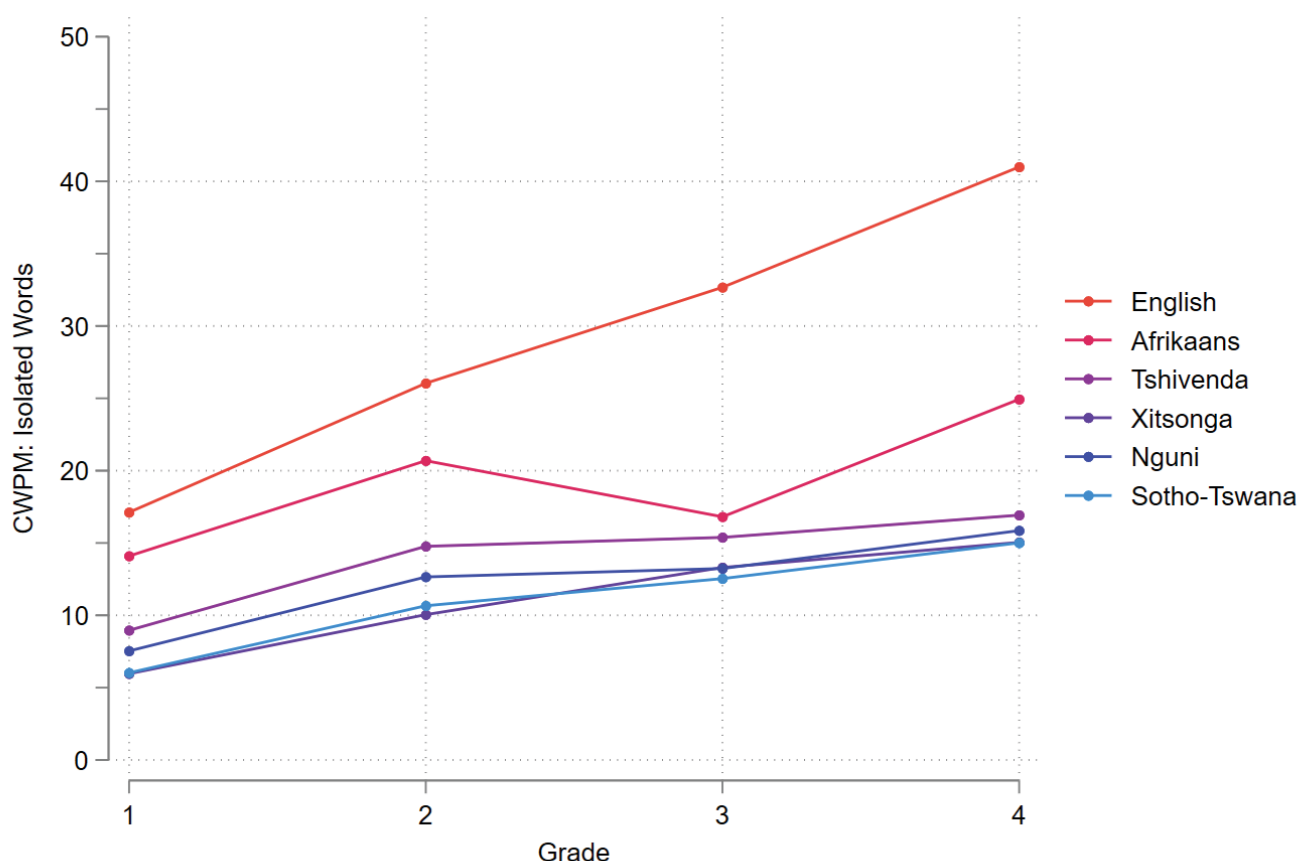
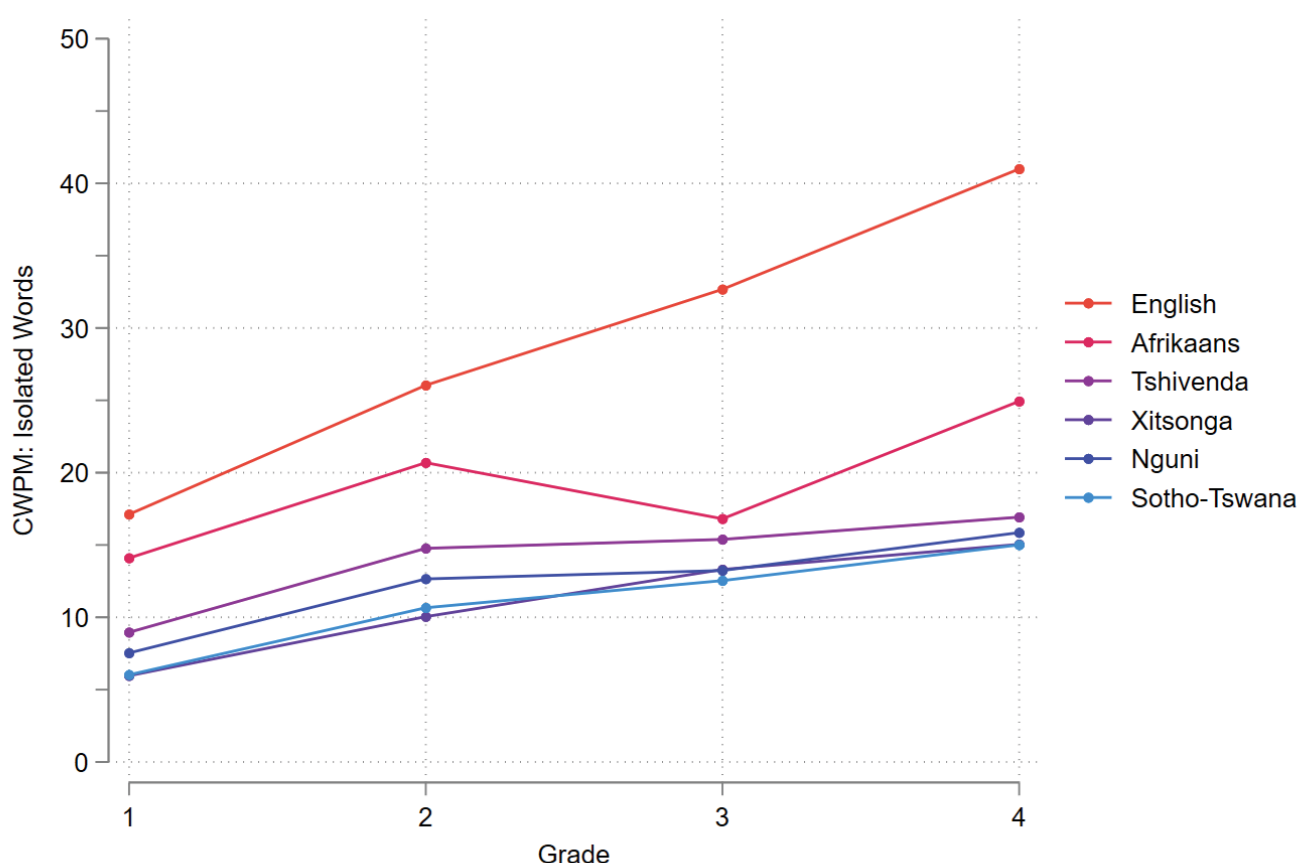


Figure 6.10.3 presents the growth in oral reading fluency. As expected, the lines representing the Nguni languages—being highly conjunctive—are lowest. Nonetheless, substantial improvements are evident from one grade to the next in all languages. In this case, the trend lines are not artificially flattened, since scores were vertically equated using a common passage administered between adjacent grades.

For the Nguni languages, learners read approximately eight additional words per minute with each grade level. In the Sesotho-Tswana languages, the increase is about 13 additional words per grade. Similar trajectories are observed for Xitsonga, Tshivenda, and Afrikaans, while in English the growth is particularly pronounced—nearly 20 additional correct words per minute with each successive grade. Interestingly, the rate of progress appears roughly linear across all language groups.



Figure 3: Growth in oral reading fluency



Figures 6.10.4 and 6.10.5 show growth in home-language comprehension, based on two different scoring protocols. In Figure 6.10.4, a strict approach was applied: learners received a score of zero if they had not read far enough in the passage for a comprehension item to be administered. In Figure 6.10.5, a more lenient approach was used, calculating the percentage correct out of the items attempted.

Each method has limitations. The strict approach may underestimate comprehension, as some learners might have understood the text had they been able to read further. However, since learners were given sufficient time to complete the passage, failure to reach later questions indicates a fundamental barrier to fluent reading. In this sense, if a learner cannot read with basic fluency, they cannot read with comprehension—though this does not imply weak reasoning or meaning-making ability.

The lenient approach, conversely, tends to overestimate comprehension, as it does not penalise very slow or uncertain reading. It also introduces selection bias: weaker readers attempt only the easier items, while stronger readers progress to more difficult ones.

Despite these differences, both figures show clear improvement across grades, particularly between Grades 1 and 2, as learners move from minimal comprehension to more adequate levels by Grades 3 and 4. The flattening at around 40% in Figure 6.10.4 suggests that fluency remains a key constraint for many Grade 4 learners. Yet the same learners achieve around 70% on items they do attempt, indicating that comprehension per se is not the main limitation. This underscores why oral reading fluency is an appropriate and sensitive benchmark for reading development in Grades 2 and 3.

Figure 6.10.4: Growth in HL comprehension (strictly measured)

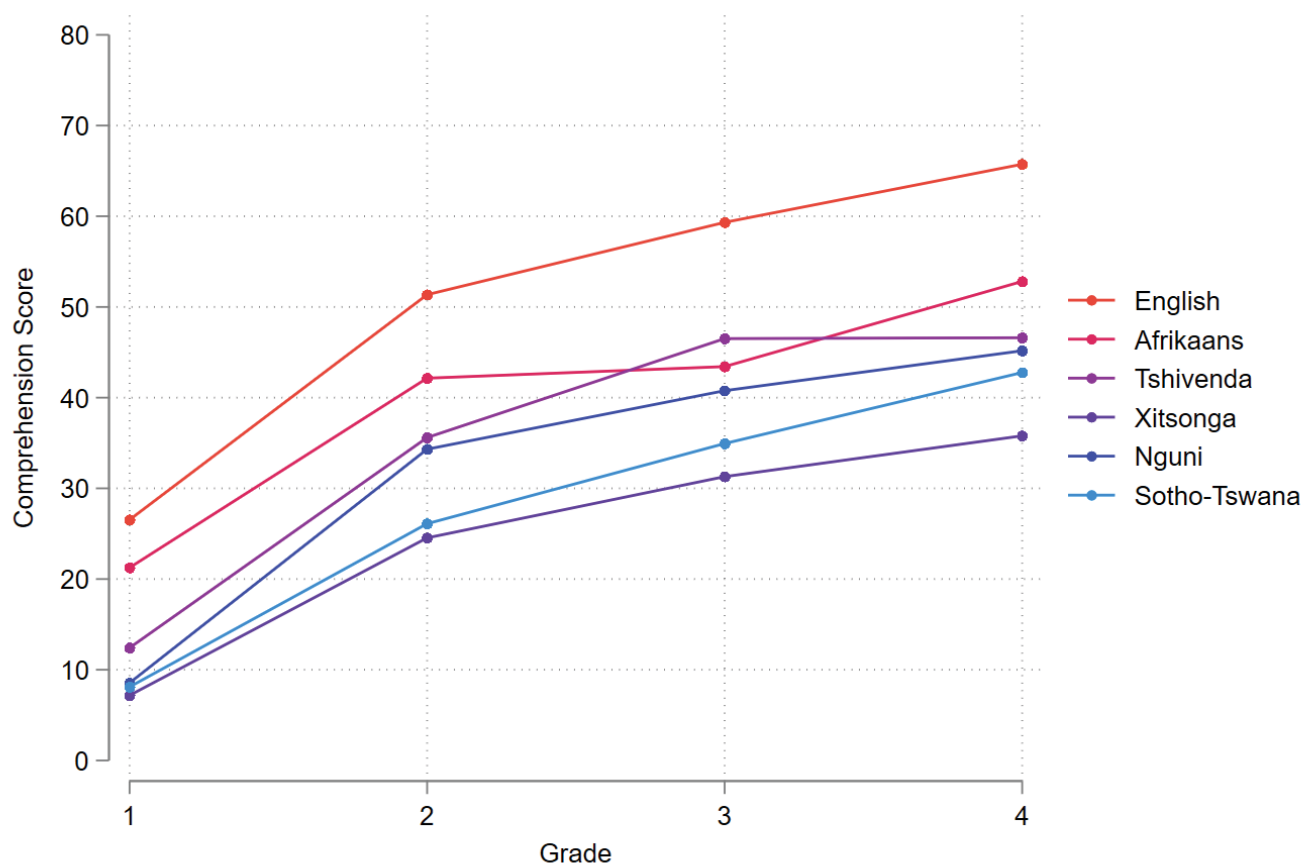
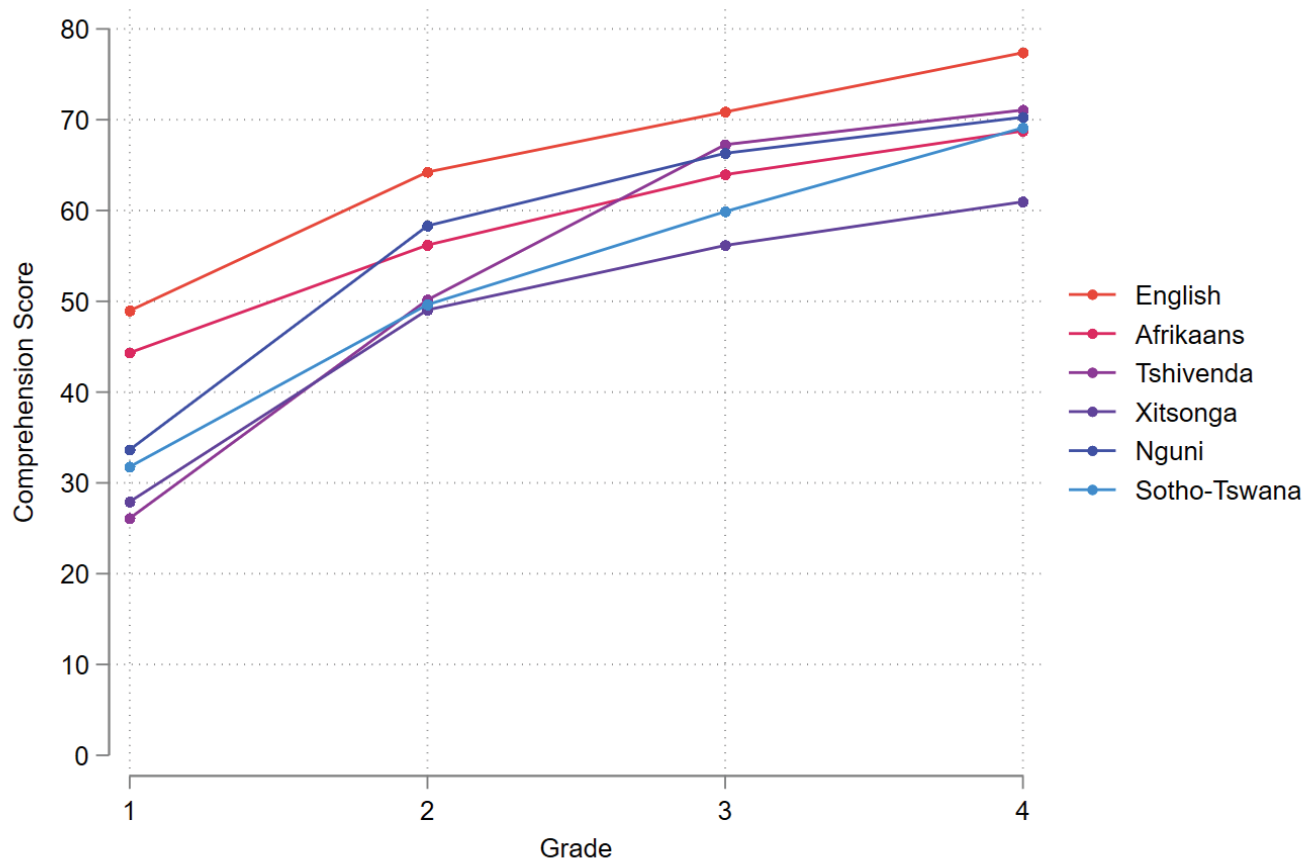


Figure 6.10.5: Growth in HL comprehension (leniently measured)



Contextual Outcomes

In addition to conducting learner assessments, school principals were interviewed to get a sense of the school context as well as to collect data on their personal characteristics. Where the school principal was not available, another educator who was part of the School Management Team was asked to take the interview. The principal questionnaire included questions on demographic information, teaching experience and qualifications, teaching load, teacher development and support as well as general literacy teaching practices, goals and needs. Table 6.11.1 reports the average characteristics of principals in the sample.

Table 6.11.1: Average Principal Characteristics by Language Group

Characteristic	Overall	English	Afrikaans	Tshivenda	Xitsonga	Nguni	Sesotho-Setswana
Is the School Principal	78%	78%	45%	74%	82%	82%	77%
Female	55%	69%	55%	52%	63%	53%	51%
Age (Years)	52.68	55.85	49.7	56.58	52.88	51.7	54.59
Experience (Years)	26.18	27.7	26.31	31.25	27.75	25.13	27.88
Teaches at School	97%	92%	96%	100%	98%	97%	97%
Highest qualification obtained:							
Higher Certificate	0%	0%	1%	0%	0%	0%	0%
Diploma (incl. NPDE, JPTD)	10%	32%	36%	2%	17%	6%	6%
Bachelor's Degree	27%	11%	36%	27%	8%	31%	24%
Post Graduate Certificate	17%	8%	16%	11%	5%	16%	28%
Post Graduate Degree	45%	49%	11%	60%	70%	47%	42%
Phase formally trained to teach:							
ECD	2%	17%	0%	0%	0%	0%	0%
Foundation Phase	24%	32%	12%	11%	24%	26%	18%
Intermediate Phase	51%	58%	55%	52%	57%	49%	51%
Senior Phase	48%	46%	41%	62%	76%	43%	59%
FET Phase	1%	2%	0%	0%	3%	1%	0%
No Formal Training	3%	0%	0%	0%	1%	5%	0%
Total Observations	691	79	67	58	56	244	187

Notes: The Nguni language group includes schools where the LOLT is one of IsiXhosa, IsiZulu, IsiNdebele and SiSwati. The Sesotho-Setswana language group includes schools where the LOLT is one of Sepedi, Setswana and Sesotho.

Just under 80% of the educators who completed the principal interview were the actual school principals, with Afrikaans schools being an exception—only 45% of educators in this group were principals. On average, the principals in the sample were 53 years old and had 26 years of teaching experience. Just over half of the sample were female, with English schools showing the highest proportion of female principals at 69%. Approximately 89% of school principals held at least a bachelor's degree, while Xitsonga and Tshivenda schools had the highest proportions of principals with postgraduate qualifications and Afrikaans schools the lowest.

Most principals reported having received formal training to teach in the Intermediate and Senior Phases, with very few having been trained for the Foundation Phase. This finding highlights an important consideration for supporting literacy teaching: principals who lack direct training or classroom experience in the Foundation Phase may require targeted professional development to effectively guide and support teachers responsible for early reading instruction. Strengthening principals' understanding of early literacy pedagogy can enhance their capacity to provide meaningful instructional support and foster a stronger culture of reading in their schools.

Table 6.11.2: School Characteristics by Language Group

Outcomes	Overall	English	Afrikaans	Tshivenda	Xitsonga	Nguni	Sesotho-Setswana
Allocate teachers to the Foundation Phase based on:							
Experience	50%	43%	26%	52%	52%	54%	44%
Qualification	80%	87%	94%	86%	89%	75%	83%
Age	4%	0%	0%	0%	0%	6%	1%
Teaching Load	20%	22%	6%	5%	3%	25%	9%
All of the above	11%	11%	8%	3%	11%	12%	12%
Home language teacher training needs:							
No further training	6%	25%	4%	3%	23%	5%	1%
Moderate further training required	68%	60%	90%	48%	43%	74%	56%
Intense further training required	25%	19%	6%	49%	35%	19%	45%
School faces the following literacy challenges:							
Overcrowded Classrooms	23%	25%	42%	18%	30%	19%	32%
Lack of reading resources	37%	35%	12%	59%	25%	37%	44%
Learner's inability to read	66%	54%	39%	66%	54%	68%	74%
Comprehension challenges	53%	58%	63%	51%	72%	45%	71%
Lack of Teacher Content Knowledge	11%	4%	3%	17%	6%	11%	15%
Learner Absenteeism	23%	13%	56%	7%	16%	28%	6%
Number of Principals	691	79	67	58	56	244	187



Schools typically report allocating teachers to the Foundation Phase based on their experience and qualifications. However, about 4% of schools, mostly Nguni language schools, also consider teacher age, while 20% of schools, primarily English and Nguni language schools, take teaching load into account. These staffing considerations may create mismatches between teacher skills and the specific demands of early literacy teaching. Consequently, some teachers placed in the Foundation Phase may not be ideally suited for the role, having been assigned based on operational needs rather than specialized expertise.

It is therefore somewhat unexpected that fewer than 20% of principals in Nguni language and English schools reported that their home-language teachers require intensive further training, and an even smaller proportion identified inadequate teacher content knowledge as a literacy challenge in their schools. This suggests that while principals may perceive their teachers as adequately prepared, there remains value in ongoing support and professional development, particularly in strengthening pedagogical skills specific to early reading.

Teachers were similarly interviewed on their demographic information, professional characteristics as well as their teaching practice and classroom characteristics. Only one teacher in the foundation phase and the Grade 4 teacher were interviewed, which resulted in 2 teacher interviews in each of the 710 schools in the sample. Table 6.11.3 below reports the average demographic and professional characteristics of teachers in the sample.

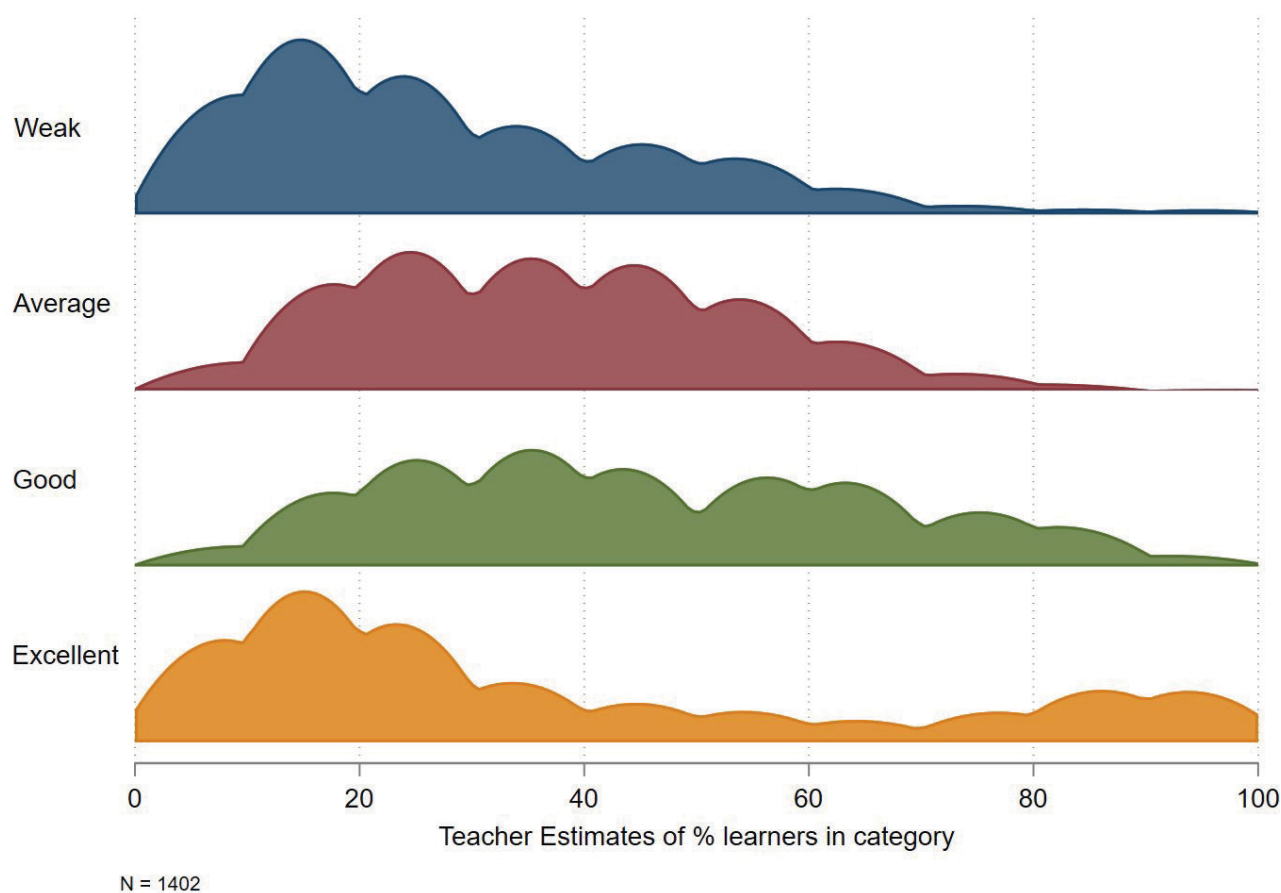
Table 6.11.3: Average Teacher Characteristics by Language Group

Characteristic	Overall	English	Afrikaans	Tshivenda	Xitsonga	Nguni	Sesotho-Setswana
Age (Years)	47.5	39.57	42.13	51.96	50.84	48.56	47.06
Experience (Years)	13.27	14.32	13.59	14.83	12.41	13.55	10.09
Female	89%	95%	87%	91%	93%	88%	89%
Highest qualification obtained							
Matric	1%	4%	0%	0%	2%	2%	0%
Higher Certificate	1%	1%	10%	0%	0%	0%	0%
Diploma	22%	11%	7%	22%	28%	25%	19%
Bachelor's	36%	50%	39%	36%	44%	33%	44%
Post Graduate Certificate	21%	15%	11%	19%	9%	23%	23%
Post Graduate Degree	18%	19%	33%	23%	17%	16%	14%
Class Size	30.35	30.23	36.41	37.75	36.34	28.87	31.38
Number of EGRA rounds this year	1.45	5.57	1.74	1.77	1.39	1.19	0.58
Grade(s) Taught:							
Grade R	3%	0%	1%	2%	1%	5%	0%
Grade 1	16%	16%	28%	10%	18%	16%	9%
Grade 2	36%	38%	15%	43%	22%	38%	46%
Grade 3	17%	6%	14%	18%	28%	18%	13%
Grade 4	43%	32%	33%	44%	43%	44%	46%
Grade 5	35%	33%	27%	34%	28%	37%	32%
Grade 6	26%	7%	22%	30%	32%	27%	29%
Grade 7	25%	4%	27%	29%	19%	27%	27%
Trained to Teach:							
ECD	4%	0%	5%	8%	3%	4%	8%
Foundation Phase	47%	55%	51%	52%	56%	42%	64%
Intermediate Phase	34%	42%	35%	29%	31%	33%	35%
Senior Phase	29%	28%	26%	24%	35%	29%	28%
FET	4%	0%	1%	5%	2%	5%	2%
Number of Teachers							
	1402	138	163	116	110	500	375

Most teachers in the sample are female (89%) and have at least a bachelor's degree (76%), with the average teacher being 48 years old with 13 years of teaching experience. Roughly half of the sample were formally trained to teach in the foundation phase which is consistent with the sampling approach which included 50% intermediate phase teachers. Average class sizes within each language group ranged from 30 to 37 learners which is within the expected range. Contrasting this with the finding that 23% of school principals reported overcrowded classrooms as a challenge to literacy, teachers may still find it difficult to manage these levels of class size in implementing literacy instruction specifically for curriculum activities like Shared Reading and Group Guided Reading where individualized attention is required.

Teachers were also asked what proportion of the learners in their classes fell into each of the following reading performance categories: Weak, Average, Good and Excellent. The results are reported in Figure 6.11.1 below.

Figure 6.11.1: Teacher's beliefs of the learner reading performance distribution



On average, teachers believed that roughly 35% of their learners fell into the Weak category. On the other end of the distribution at the 'Excellent' category, there was variation in teacher responses with a large group believing that only 20% of their learners fell into this category and a different group believing that most of their learners fell into the "excellent" category. The next analysis compares teacher beliefs with the actual measured learner performance, where it was seen that most learners are not meeting reading benchmarks and many were essentially non-readers (See Section 7). We derive a variable to indicate the performance category that teachers said the majority of their learners fell into and plot this against the distribution of measured learner scores for each group in Figure 6.11.2 and Figure 6.11.3 below

Figure 6.11.2: Learner performance by teacher reported modal reading categories (Letter Sound Recognition)

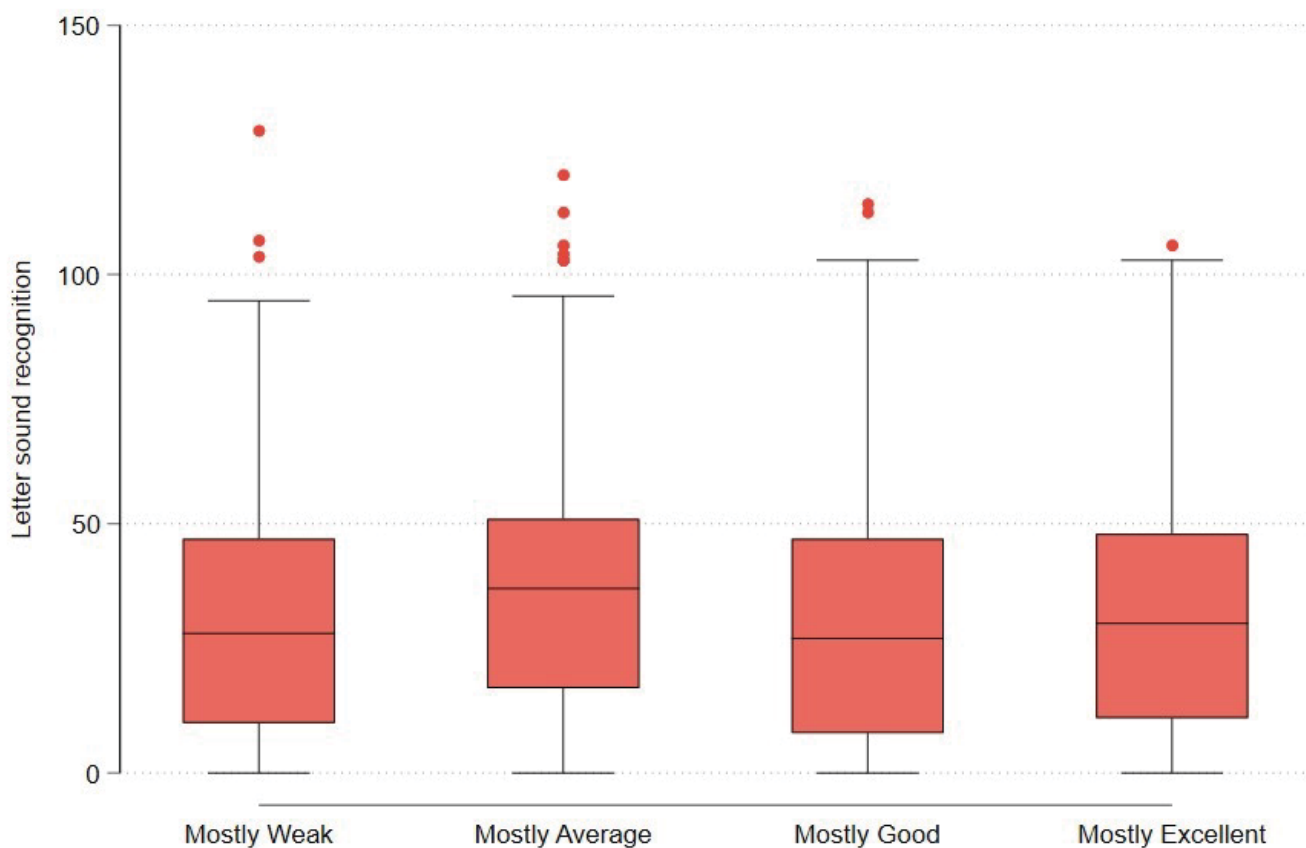
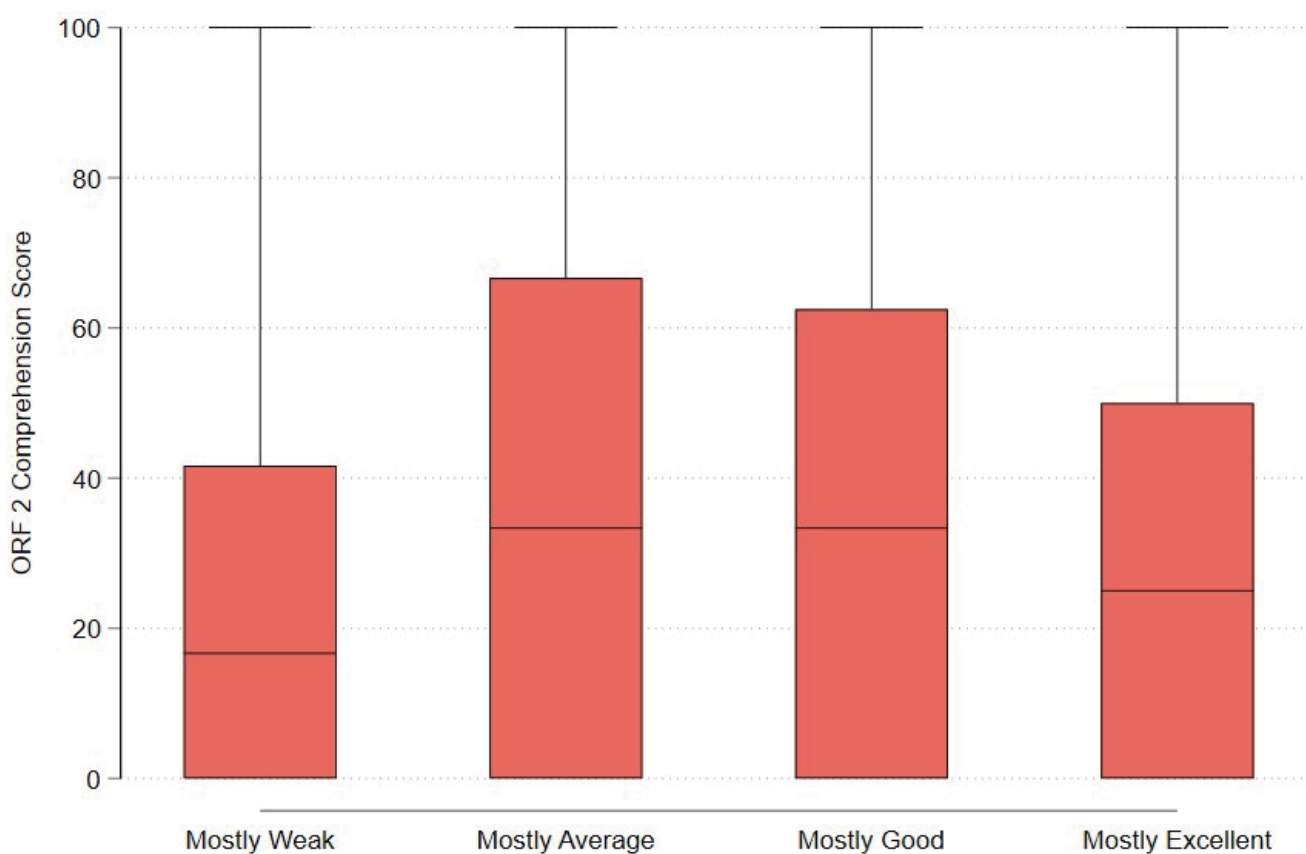


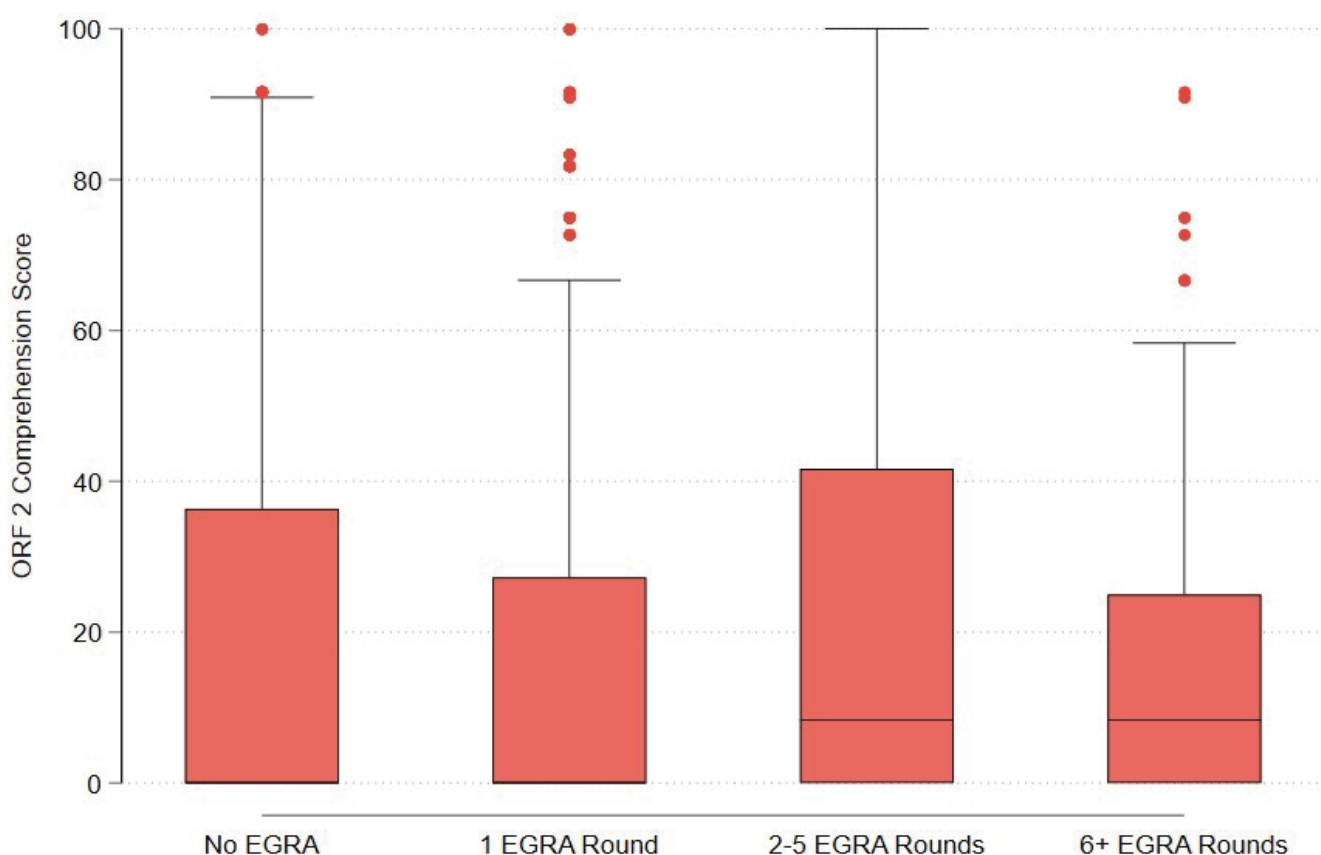
Figure 6.11.3: Learner performance by teacher reported modal reading categories (ORF Comprehension)



The distribution of learner's letter sound knowledge for teachers who said their learners had mostly weak reading proficiency was similar to those who said their learners were mostly good and excellent, with the median learner reading about 30 letter sounds correctly per minute. This corresponds to the average letter sound recognition performance in the full sample (Table 6.2.1). Interestingly, the group of teachers who said their learners mostly had average reading proficiency saw the highest median letter sound recognition performance. Turning to comprehension, when teachers said their learners were mostly weak, the learners indeed had the lowest comprehension scores. The learners of teachers who said their class had mostly average reading proficiency attained a higher comprehension score (median of 33%) than those who said their class had mostly excellent reading proficiency (median of 25%). Average comprehension scores ranged from 15% in Grade 1 to 44% in Grade 4 supporting that the group of teachers who said their learners were mostly average and mostly weak were fairly accurate. This in turn suggest that teachers who said their learners were mostly Good and Excellent, overestimated the performance of their learners.

Teachers overestimating the performance of their learners and consequently underestimating learning gaps could also be symptomatic of how few of them are using diagnostic assessment tools like the Early Grade Reading Assessment (Table 6.11.3). To explore this, we group teachers into categories of how many EGRA assessments they report having conducted and plot the distribution of learner scores in ORF Comprehension (Figure 6.11.4) below. The learners of teachers who conducted zero and 1 EGRA had the lowest comprehension scores. While the distributions of learner scores for two groups of teachers conducting more than 2 EGRA assessments have a similar median, the distribution for those conducting 2-5 rounds of assessments is more skewed to the right as indicated by the longer top whisker. The learners of the teachers in this group would therefore have a higher mean comprehension score. These findings suggest that there is a positive association between teachers conducting diagnostic assessment and learner performance. Secondly, there is no additional benefit to conducting more than 5 EGRA assessment rounds within the school year.

Figure 6.11.4: Learner performance in ORF Comprehension by number of EGRAs conducted



In summary, the findings show that literacy teaching and learning in the Foundation Phase is occurring within a generally experienced but unevenly prepared system. While these findings suggest a highly qualified school leadership cohort, few principals have received formal training specific to the Foundation Phase, limiting their direct exposure to early literacy pedagogy and practices. This gap has implications for their capacity to provide instructional leadership and targeted support to teachers responsible for early grade reading. Staffing practices further complicate the context for literacy teaching. While most schools allocate teachers to the Foundation Phase based on experience and qualifications, there is a small proportion who factor in other criteria. These criteria, while practical, may lead to mismatches between teacher skills and the specific pedagogical content requirements of early literacy instruction. The findings further suggest an underestimation of teachers' continuous professional development needs.

Classroom conditions present additional challenges. Average class sizes ranged from 30 to 37 learners, within expected norms, but nearly a quarter (23%) of principals identified overcrowding as a literacy challenge. Such class sizes can make individualized instruction, particularly for activities such as Shared Reading and Group Guided Reading, difficult to manage. Finally, there appears to be a disconnect between teacher perceptions of learner reading ability and actual learner performance. This discrepancy may reflect a lack of accurate diagnostic assessment practices, as few teachers reported using tools such as the Early Grade Reading Assessment in addition to the staffing challenges already highlighted.



Interpreting the Results

Early measurement allows for the identification of expectations and responsibilities, empowering teachers and provinces to take action early. Tracking these skills over time enables the assessment of progress, particularly in constrained skills like alphabet knowledge.

The results indicate that only 31% of children achieve the letter sound recognition benchmark by the end of Grade 1, with 30-33% reaching this benchmark across Grade 1-3 in the Home Languages. These low attainment rates necessitate urgent attention.

In English as a first additional language, 35-38% of learners attain the benchmark, slightly higher than home language attainment. However, this comparison is nuanced, as benchmarks are set at a second language level.

The findings also reveal gaps in attainment related to socioeconomic status and persistent gender gaps, warranting further attention. A significant number of children scored zero, indicating an inability to read a single word per minute.

These results collectively suggest that learning challenges typically identified in the intermediate phase emerge earlier, underscoring the need for evidence-based interventions to support learners in acquiring reading skills from an early age.

Regarding morphological awareness and semantics, children demonstrate relatively high morphological awareness skills. However, no correlation exists between these skills and decoding abilities, highlighting the need for explicit instruction in decoding.



Next Steps

While this report and the accompanying Technical report provide details at an average level nationally and provincially, further steps to engage with the findings and engage on further steps are needed. These may be summarised as follows:

1. Disseminating results: findings from the survey should be shared with districts and circuit-based support staff, as well as school leaders, and teachers to raise awareness and promote understanding.
2. Empowering teachers: coherent and consistent programmes to equip teachers with the skills to both measure emergent skills including reading fluency should be strengthened. All teachers need to be trained to identify learners who are not meeting benchmarks. As a linked aspect, teachers need support to develop their practices in remedial actions based on the specific.
3. Language-specific guidance: the development of the benchmarks clearly demonstrated the need to pay specific attention to each language, respectively. While there are national gaps and acknowledges the distinct features of each of the eleven languages.

By taking these steps, the goal is to drive change at the classroom level, enabling teachers to provide targeted support to learners and ultimately improve reading outcomes.

