BENCHMARKING EARLY GRADE READING SKILLS IN SOUTH AFRICA:
TSHIVENḒA HOME LANGUAGE

Summary Report

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Photo: Reading Assessment Limpopo Province, South Africa.
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DG FOREWORD

In early 2019 South African President Cyril Ramaphosa articulated a new and clear expectation for basic education: every child should be able to read for meaning by age 10 (Government, 2019). While reading for meaning is the goal of reading, reading is a complex and hierarchical process. A range of foundational reading subskills needs to be mastered before one can comprehend or understand what is in a text.

In response to this , the Department of Basic Education (DBE) in collaboration with various stakeholders has been leading the establishment of early-grade reading benchmarking for the eleven spoken South African Languages of Learning, Teaching, and Assessment (LoLTAs). It is my great honour to share the newly developed Tshivenḓa early-grade reading benchmarks. This is the eleventh language the Department of Basic Education has benchmarked since 2020. I believe these benchmarks will contribute to improvements in the teaching of early grade reading in several ways, including being a tool to support teachers with specific Tshivenḓa language nuances.

The collaboration between the government, universities, funders, and data analysts is commendable. I specifically want to thank United States Agency for International Development (USAID) which funded the work.

As a department, we continue to be committed to improving learning and teaching throughout the education system. The Foundation Phase is a fundamental period to establish basic competencies and over time we have been working to strengthen the inputs and support for teachers for this phase. The Framework for Teaching Reading in African Languages was the first phase of this, and we have continued to build on this work through several efforts including the reading benchmarks. We are committed to continue making every effort to support reading with a special and necessary emphasis on African languages.

MR HM MWELI
DDIRECTOR-GENERAL
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PREAMBLE

This report, produced by Khulisa Management Services (Pty) Ltd. (Khulisa), is submitted under the Data Collection and Analysis for the Early Grade Reading Study (EGRS), the Reading Support Project (RSP) and Language Benchmarking to the United States Agency for International Development (USAID) under PERFORMANCE Indefinite Delivery Indefinite Quantity (IDIQ) Contract Number: 72067418D00001, Order Number: 72067419F00007.

This report derives from the 2023 data collection conducted in the Limpopo Province, South Africa, to establish Tshivenḓa Early Grade Reading Benchmarks.

Several reports have been published under this IDIQ and Task Order and are helpful as background.

- The methodology for Setting Reading Benchmarks In South Africa is outlined in this report https://pdf.usaid.gov/pdf_docs/PA00X1NZ.pdf.
- Methodology Plan and Study Protocol: Data Collection and Analysis for setting Tshivenḓa Benchmarks: https://pdf.usaid.gov/pdf_docs/PA0218H7.pdf
- For the full instrument development process, refer to the "Report on the Development of Learner Assessment Tools and Contextual Tools" https://pdf.usaid.gov/pdf_docs/PA021BGB.pdf
- The Quality Assurance Surveillance Protocol (QASP) documents the quality assurance elements of both data collection and analysis. https://pdf.usaid.gov/pdf_docs/PA00Z8SX.pdf

Reports are available on the USAID Development Experience Clearinghouse https://dec.usaid.gov/dec/home/Default.aspx and the Department of Basic Education Research Repository https://www.education.gov.za/Research,MonitoringEvaluationReports.aspx.

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ACRONYMS

CLSPM	Correct letter sounds per minute
CWPM	Correct words per minute
DBE	Department of Basic Education
EFAL	English First Additional Language
EGRA	Early Grade Reading Assessment
HL	Home language
ODH	Orthographic depth hypothesis
ORF	Oral reading fluency
PGST	Psycholinguistic grain size theory
PIRLS	Progress in International Reading and Literacy Study
SAIDE	South African Institute for Distance Education
SVR	Simple view of reading

1 INTRODUCTION

This report introduces the Tshivenḓa Home Language reading benchmarks for the South African Department of Basic Education (DBE). Derived from data collected in 60 no-fee schools in Limpopo from May to June 2023, the research intends to provide an important resource to support the improvement of early-grade reading outcomes in Tshivenda Home Language. Tshivenḓa, spoken mainly in South Africa's Limpopo province by the Venda and some Lemba people, represents 2.4% of the South African population.

Despite efforts to provide quality basic education in South African schools, many South African learners face reading difficulties. The 2016 and 2021 Progress in International Reading and Literacy Study (PIRLS) studies revealed substantial gaps in reading comprehension. The PERFORMANCE initiative by USAID Southern Africa supports the Department of Basic Education to fill these gaps. This research project offered a collaborative platform for experts and the DBE to add Tshivenḓa reading benchmarks to the body of benchmarks already developed by the DBE.

Based on early grade reading assessment (EGRA) data, this report establishes benchmarks for letter-sound knowledge and oral reading fluency (ORF) in Tshivenḓa. Informed by expert insights, this report integrates a theoretical understanding of reading development with knowledge about the orthographic structure of Tshivenḓa in order to make sense of reading data collected in the typical no-fee school setting in Tshivenḓa -speaking schools in Limpopo.

The report recommends grade-specific reading fluency benchmarks for Grades 1, 2, 3, and 6, emphasising alphabetic knowledge, emergent fluency, and adequate comprehension. These benchmarks are presented below.
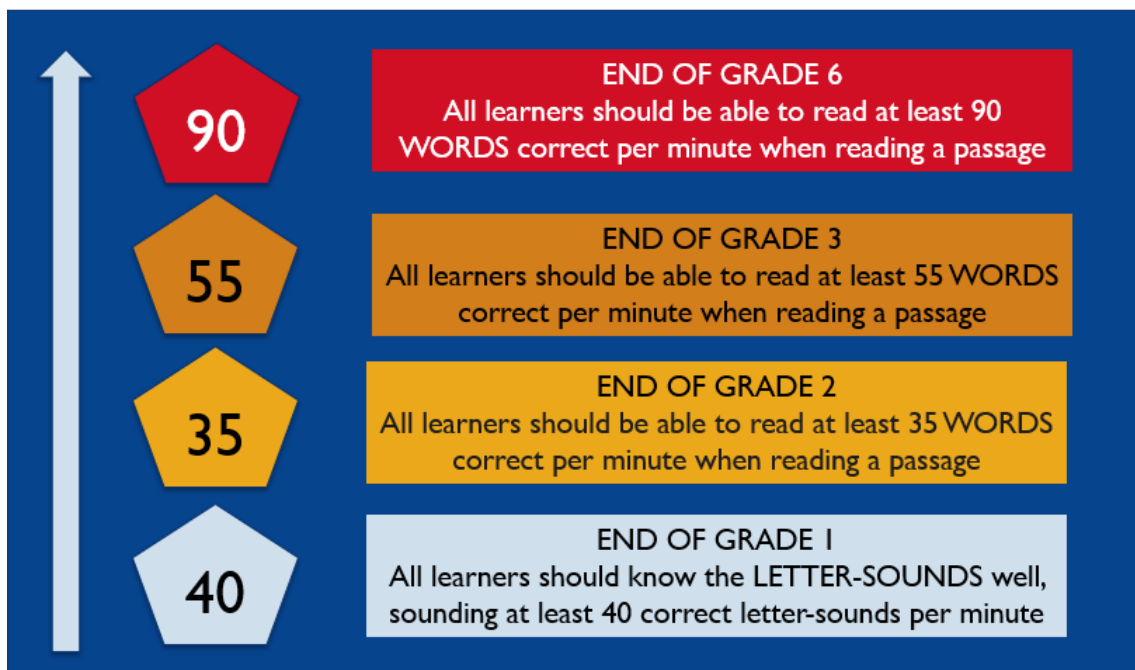
2 THEORETICAL FRAMEWORK FOR READING DEVELOPMENT

Reading comprehension is pivotal for learners to access the curriculum, yet many South African children grapple with it in both native languages and English. To address this, it is essential to comprehend the mechanisms underpinning successful reading. Reading is multifaceted, requiring varied skills and knowledge, including linguistic aspects, textual factors, and code-based elements, all supported or hindered by external variables like socio-economic conditions and access to resources. Historically, reading theories have been Eurocentric, but recent research has begun incorporating insights from other linguistic systems, particularly languages with transparent orthographies which share similarities with African languages.

Three influential reading acquisition models are highlighted:

- Simple View of Reading (SVR): Asserts that comprehension requires both decoding (knowledge of the written code) and oral language proficiency. While early reading hinges on decoding, later stages prioritise language proficiency and cognitive processes like inference-making.
- Decoding Benchmark Hypothesis: It refines SVR by suggesting a non-linear relation between decoding and comprehension. A minimum decoding proficiency is required for comprehension, and beyond a certain fluency level, further decoding improvement does not enhance comprehension.
- Orthographic Depth Hypotheses (ODH) and Psycholinguistic Grain Size Theory (PGST): They postulate that reading processes differ based on a language's orthography. Transparent languages like Tshivenḓa, with consistent letter-sound mappings, promote quicker reading acquisition. PGST expands on this, emphasising the importance of 'grain size', or the units used for decoding, suggesting transparent languages utilise smaller grain sizes.

Reading proficiency evolves with time, and the skills crucial for a Grade 1 reader differ from those for a Grade 4 or Grade 7 reader. Effective teaching focuses on achieving accurate decoding and then supports the learners' progression to faster, automatic processing to free cognitive resources for comprehension. However, benchmarks for transitioning from decoding to comprehension differ across languages.

3 READING IN TSHIVENḒA

3.1 Linguistic features

South Africa recognises 12 official languages in three groupings. Tshivenḓa forms part of the Southern Bantu language family (Figure 1).

The Southern African Bantu Languages all use the Roman alphabet and are regarded as agglutinating, meaning they add multiple prefixes and suffixes to word roots, and have transparent orthographies where the letter-sound relationship is regular. For example, in Tshivenḓa, the sound /f/ is always represented by the letter f, as in 'funza' and 'funa'. The Sesotho-Setswana languages (such as Setswana) can be considered more disjunctive, while the Nguni languages (such as isiXhosa) occur more on the conjunctive side of the continuum. Tshivenḓa fit in the middle of the continuum, slightly more disjunctive than Xitsonga. Tshivenḓa and Xitsonga words are, on average 4.07 and 4.29 letters long, respectively, while Nguni languages have longer words - ranging from 5.88 (isiXhosa) to 7.18 (isiZulu) letters per word (Prinsloo & de Schryver, 2002). Prinsloo and de Schryver (2002) found that the Sesotho languages had similar average word lengths at 3.88 for Sesotho and Sepedi and 3.89 for Setswana.

Word length affects reading speed, with denser languages like Nguni having fewer words per minute than others. The Tshivenḓa orthography includes complex consonant sequences like 'ntsh' and 'tsh'. These sequences, crucial for early reading development, require effective phonics instruction.

Additionally, Tshivenḓa uses diacritics. Though these offer clarity in pronunciation and meaning, they add to the learning curve for early readers by increasing the number of phonics to recognise and differentiate. Another unique feature of Tshivenḓa and other African languages is their phonology. Unlike English and Afrikaans, with extensive vowel systems, Southern African Bantu languages have fewer vowels but complex consonant systems, including tones which can change word meanings. In Tshivenḓa, the tone is phonemic, different from non-tonal languages like English and Afrikaans.
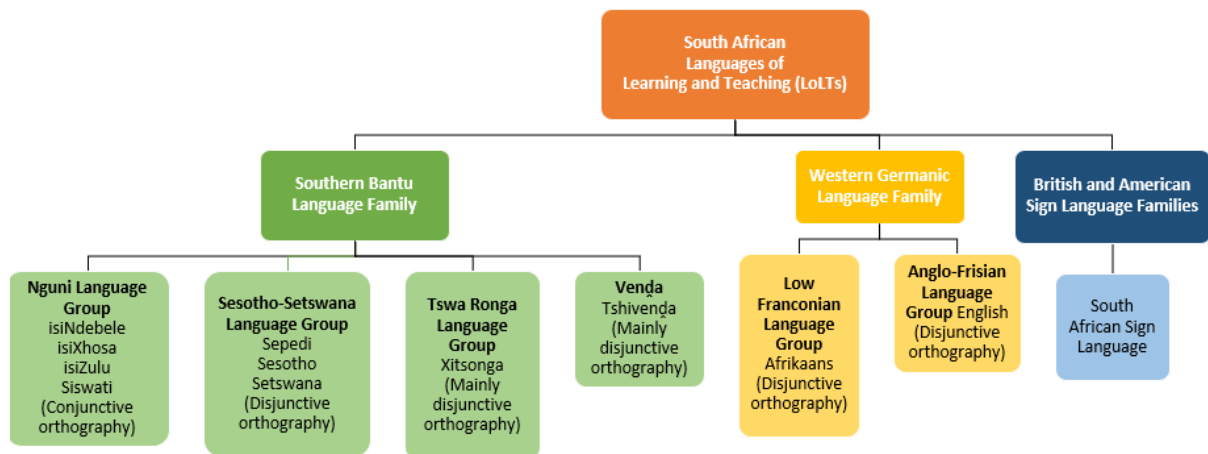

Figure 1 South African official languages, Mohohlwane (2023)

4 BENCHMARKING METHODOLOGY

It is crucial to understand the role of decoding skills to set reading benchmarks that support the development of reading comprehension. Several studies highlight a specific pattern: comprehension is achieved when decoding reaches a certain fluency benchmark (Wang et al., 2019; Kim, 2017; Kim & Wagner, 2014). Intriguingly, Wang et al. (2019) propose that there is a point where further improvement in decoding does not necessarily lead to better comprehension.

The research is centred on pinpointing these decoding benchmarks in learners. It is important to set these benchmarks to reflect the real-world learning environment. They should be attainable for most early-grade learners, yet also set a standard that encourages reading improvement. The research incorporated data-driven methodologies to ensure the relevance and appropriateness of these benchmarks. Furthermore, the research team consulted with linguistic and Tshivenḓa language experts to bolster the robustness of the method.

4.1 Statistical Methods

This research is based on the work of Wills et al. (2022a), Ardington et al. (2020,2021a), and Jukes et al. (2020) and uses non-parametric techniques to scrutinise the relationship between reading accuracy-speed and fluency-comprehension in the Tshivenḓa language. Traditional benchmarking often hinges on a fixed comprehension metric, such as 80% correct answers, and evaluates the associated fluency levels. The benchmarking methodology offers three distinct advantages. Firstly, it refrains from making assumptions about the relationship between speed-accuracy and fluency-comprehension, acknowledging potential linguistic and pedagogical nuances. Secondly, the benchmarks address challenges in comparing comprehension questions across different texts and languages, an issue showcased in the Tshivenḓa data analysis. Finally, unlike conventional methods that rely on a predetermined expected comprehension level, the approach evaluates the entire spectrum of reading performance, allowing for a more comprehensive understanding of learner progress.

Previous research on Nguni and Sesotho-Setswana languages suggests a non-linear relationship between reading accuracy and speed. Initially, both metrics improve in tandem, but over time, increases in speed do not correspond with significant accuracy improvements. This plateau can guide the establishment of a reading benchmark, helping determine the optimal reading speed for achieving accuracy. Similarly, this research analyses the relationship between fluency (a combined measure of speed and accuracy) and comprehension using non-parametric techniques. To collect the data supporting this analysis, learners are given three minutes for reading and answering Oral Reading Fluency (ORF) comprehension questions set at a grade appropriate level. Furthermore, referencing benchmarks set in Nguni and Sesotho-Setswana languages, our study delves into whether Tshivenḓa-speaking Grade 1 learners should be reading at least 40 correct letter-sounds per minute, using Tshivenḓa data for empirical validation.

4.2 Learner Sample

In Term 2 of 2023, reading benchmark data for Tshivenḓa was collected. While benchmarks typically assess performance at the end of the academic year, disruptions from COVID-19 led to significant learning losses in South Africa's no-fee schools in 2020 and 2021. To address this, Grade 3 learners were tested in Term 2 to determine Grade 2 benchmarks, and similarly for Grades 4 and 7 to establish Grade 3 and 6 benchmarks. Data collection took place in the Vhembe East and West districts from 60 out of 682 Quintile 1 to 3 schools with Tshivenḓa as the teaching language. In the

analysis, 1,039 Grade 2, 1,044 Grade 4, and 1,074 Grade 7 learners had their data analysed. The majority spoke Tshivenḓa at home, with an almost even gender distribution. The age range in the different grades was quite broad, indicating that grade repetition is a significant factor (see table below).

Table 1 Learner sample

	Grade 3	Grade 4	Grade 7
Age			
Mean age	8 years 5 months	9 years 5 months	12 years 7 months
Minimum age	7 years	8 years	11 years
Maximum age	13 years	14 years	16 years

5 LANGUAGE ASSESSMENTS

New Tshivenḓa language assessments were developed to answer the three pertinent benchmarking questions:

1. **What are the letter-sound benchmarks for Tshivenḓa that identify whether learners are developing sufficient foundational decoding skills necessary for accuracy in reading?**

2. **What is the Fluency threshold that identifies learners who are entering an emergent level of fluency which supports reading accuracy, but which is not yet sufficient to read for meaning?**

3. **What is the Oral Reading Fluency (ORF) benchmark that identifies a lower bound level of fluency necessary for learners to comprehend what they are reading and articulates to teachers a point at which they should concentrate on further developing comprehension skills?**

The Tshivenḓa instruments underwent three refinement phases, with a team of multidisciplinary experts leading the development. DBE researchers ensured these tools aligned with tools used to develop the reading benchmarks in other languages. The research team adjusted existing instruments to match the difficulty level of Tshivenḓa, changing text lengths, layouts, titles, and comprehension questions. The team sourced new reading passages from open resources and selected texts from Molteno and SAIDE. From four shortlisted passages, they incorporated two into the final assessments and adapted others from Setswana and Xitsonga materials. The three-phase pilot aimed to set the right instrument level, ensure appropriate language context and determine the ideal assessment length.

5.1 Assessment tasks

A range of assessment tasks were administered. The reading assessments span various skills, with foundational skills tested in early grades and more advanced skills in Grade 6. The structure corresponds with the Tshivenḓa early reading curriculum. Two passages per grade were read during the ORF assessments.

5.1.1 Letter Sound Knowledge Assessments (Grades 3 and 4)

This task evaluates learners' recognition and articulation of letter-sounds. Presented with a card of 60 letters, learners have 60 seconds to identify and vocalise letter-sounds. Tshivenḓa excludes the letters' 'q', 'j', and 'c'. Another task presents 45 complex consonants for articulation within a 60-second timeframe.

5.1.2 ORF and Oral Reading Comprehension Assessments (Grades 3, 4 and 7)

ORF measures reading speed and accuracy, blending decoding and word recognition with reading ease (automaticity). Learners read a passage for 60 seconds, but can continue for another 120 seconds. Post-reading, enumerators pose comprehension questions from the PIRLS taxonomy. Two passages per grade underwent evaluation with associated comprehension questions.

5.1.3   Reading Comprehension (written) Assessments (Grades 4 and 7)

The written assessments evaluate comprehension using the PIRLS process through literal, inferential, integrative, and evaluative questions. Most questions test basic comprehension levels. Tshivenḓa HL data examines the fluency-comprehension relationship in higher grades. Both narrative and informational texts were crafted for the assessment.

5.1.4   Other Reading Assessment Tasks Administered

Apart from the primary assessments, the research also assessed Grades 3 and 4 learners on other reading skills, such as Rapid Object Naming, Syllable Awareness, Phonemic Awareness, Syllable Reading, and Word Reading. A written comprehension test was also administered to Grade 7 learners.

6   LEARNER PERFORMANCE

The table below presents the results of Grade 3, 4, and 7 learners on five of the assessed subtasks.

Table 2: Mean letter-sound fluency, word reading, ORF, oral reading comprehension, and written comprehension

Grade	Observations	Letter sounds (*clspm*)	Word reading (*cwpm*)	ORF (*cwpm*)	Oral reading-comprehension (% correct)[1]	Reading comprehension (written) (% correct)
3	1039	41.6	24.9	Passage 1: 33.5 Passage 2: 41.2	Passage 1: 32% Passage 2: 41%	Not assessed
4	1044	39.7	27.7	Passage 1: 42.3 Passage 2: 41.1	Passage 1: 56% Passage 2: 42%	43%
7	1074			Passage 1: 58.5 Passage 2: 74.0	Passage 1: 45% Passage 2: 54%	63%

6.1   Lettersounds

Grade 3s and Grade 4s averaged 41.6 and 39.7 correct single letter sounds per minute, whilst Grade 7s were not tested on letter sounds. The Foundation Phase curriculum focuses on letter-sound knowledge while the focus of reading instruction shifts away from letter-sounds in Grade 4. This may explain why Grade 4s had a slightly lower average than Grade 3s (a pattern found in other South African languages (Ardington et al., 2020).) The average correct letter sound per minute (*clspm)* for Grade 3s (42 *clspm*) is similar to that observed for Grade 3 Sepedi learners who were tested with an EGRA in 2021 (38 *clspm*) (Ardington et al., 2022).

6.2   Word Reading

Grade 3 learners read 24.9 *cwpm* on the word reading task on average, while Grade 4 learners read slightly more words at 27.7 correct words per minute (*cwpm).* Learners read fewer words correctly in a minute in the word reading tasks than in the ORF tasks. One reason for this discrepancy may be that the passages contained many single-syllable short words (either a single vowel or one vowel and one consonant), which were not present in the word reading task. These are easier and quicker to read than longer words, increasing the reading rate. The slow reading rates for words in isolation also indicate poor mastery of the alphabetic code; the absence of contextual cues suggests that the rapid recognition of letters and orthographic patterns within words has not yet been automatised.

6.3   Oral Reading Fluency and Oral Comprehension

Grade 3 learners struggled more with the first passage than the second. This was true for ORF scores (where the first passage's average ORF score was 33.5 and the second passage was 41.2) and for comprehension (where the first passage's average comprehension score was 32% and the second passage was 42%). This could be because the second passage felt more familiar as it was about playing with a doll, whilst the first was about a child who was fastidious about cleanliness.

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[1] Comprehension scores calculated as a percentage of the number of questions asked.

The two passages read by Grade 4 yielded very similar ORF scores (42.3 and 41.1, respectively, on average). These ORF scores were very similar to those achieved by the Grade 3 learners in their second passage, suggesting convergence in ORF between the two grades in at least some texts.

Despite the Grade 4 learners scoring similarly in ORF across the two passages, they found the second passage more difficult in their comprehension questions. On average, Grade 4 learners scored 56% in the comprehension questions related to the first passage and 42% for those associated with the second passage. Again, we see similar comprehension performance between Grade 3 and 4 on one of the passages (Grade 3 scored 42% on their second passage, and Grade 4 scored 42% on their second passage). However, Grade 4 scored much higher in comprehension on passage one (56%) than Grade 3 did on passage one (32%).

Grade 7 learners did better in ORF and comprehension in their second passage than in the first. Again, this could be because of the content of the passages. The first Grade 7 passage was an informational text, while the second was a narrative text. This difference in results between informational and narrative text was also seen in some other South African languages (Ardington et al., 2022). Grade 7 learners perform similarly to Grade 4s in oral reading comprehension but outperform the Grade 4s in their written comprehension scores (Grade 3s were not tested on written comprehension).

It is possible that some of the weaker-than-expected performance of Tshivenḓa Grade 4 learners relative to Grade 3 learners could be attributed to the uneven impact of COVID-19 and associated school closures on the two grades. The Grade 4 learners were in Grade 1 in 2020 (the year with the most lost learning time) and Grade 2 in 2021 (which also had significant lost learning time). Conversely, the Grade 3s were in Grade R in 2020 and Grade 1 in 2021. However, we cannot attribute any causal impact of COVID-19 without further exploration.

7 READING BENCHMARKS

Benchmarks were proposed based on an analysis of the reading fluency and reading comprehension results of those learners who read far enough into the reading tasks and completed at least 70% of the comprehension questions. The early-grade reading benchmarks for Tshivenḓa are as follows.
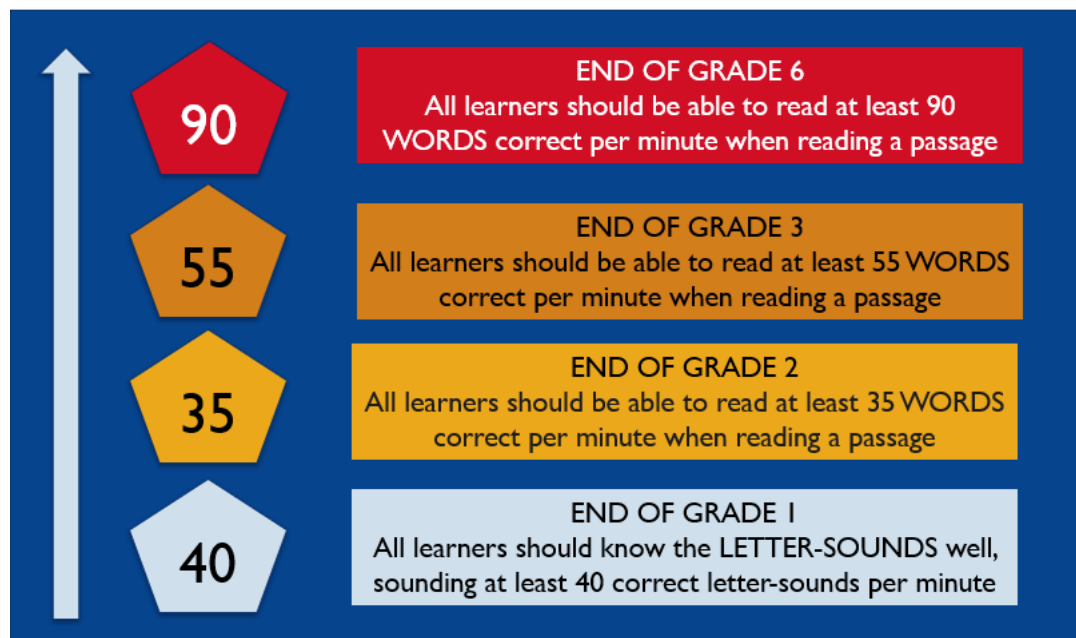
- **Grade 1: Learners should achieve 40 correct letter-sounds per minute (clspm).**
  - This standard is as relevant for Tshivenḓa Home Language (HL) learners as for other African language readers.
- **Grade 2: Learners must read a minimum of 35 correct words per minute (cwpm) from a passage.**
  - Falling below this mark indicates poor accuracy and comprehension difficulties. Such learners need instruction focusing on fluency and frequent reading practice. This benchmark ensures a transition from mere decoding to engaging in advanced reading skills. Post-pandemic, 44% to 56% of Grade 3 learners attained this benchmark by Term 2.
- **Grade 3: The benchmark is set at 55 cwpm.**
  - Achieving this fluency means the learner's working memory is not bogged down by decoding, allowing them to grasp the text's meaning better. After the pandemic, only 22% to 23% of Grade 4 learners achieved this fluency in Term 2. It is crucial for learners in Grade 3 to engage with both narrative and informational texts to improve their fluency. The Ulwazi Lwethu project has introduced a book series (Ulwazi Lwethu) aiming to help in this regard.
- **Grade 6: The benchmark rises to 90 cwpm. By this grade, learners need to tackle lengthier and more intricate texts, requiring an unburdened working memory**.
  - Those reading below 90 cwpm will find retaining information from extended texts challenging. In a post-pandemic Grade 7 sample from Term 2, only 29% met this benchmark for narrative texts, and just 8% did for informational texts. This

emphasises the importance of introducing learners to diverse text types in African languages, extending beyond narratives during primary education.

While children should ideally achieve these benchmarks, many older learners in the research sample do not, suggesting significant instructional deficiencies in classrooms rather than unattainable benchmarks.

8 BENCHMARK ANALYSIS

The benchmarks were set based on an investigation of the relationship between reading speed and accuracy, and the relationship between fluency and comprehension. Interesting findings that relate to the analysis are presented here.

8.1 Lettersound Benchmarks

Figure 2 shows the relationship between speed and accuracy in Tshivenḓa letter-sound knowledge for Grade 3 and Grade 4 learners. Accuracy is defined as the percentage of attempted letters that a learner got correct. As is the case for word reading, speed and accuracy increase sharply together before accuracy flattens off. Reading at least 40 letter-sounds per minute coincides with greater accuracy.

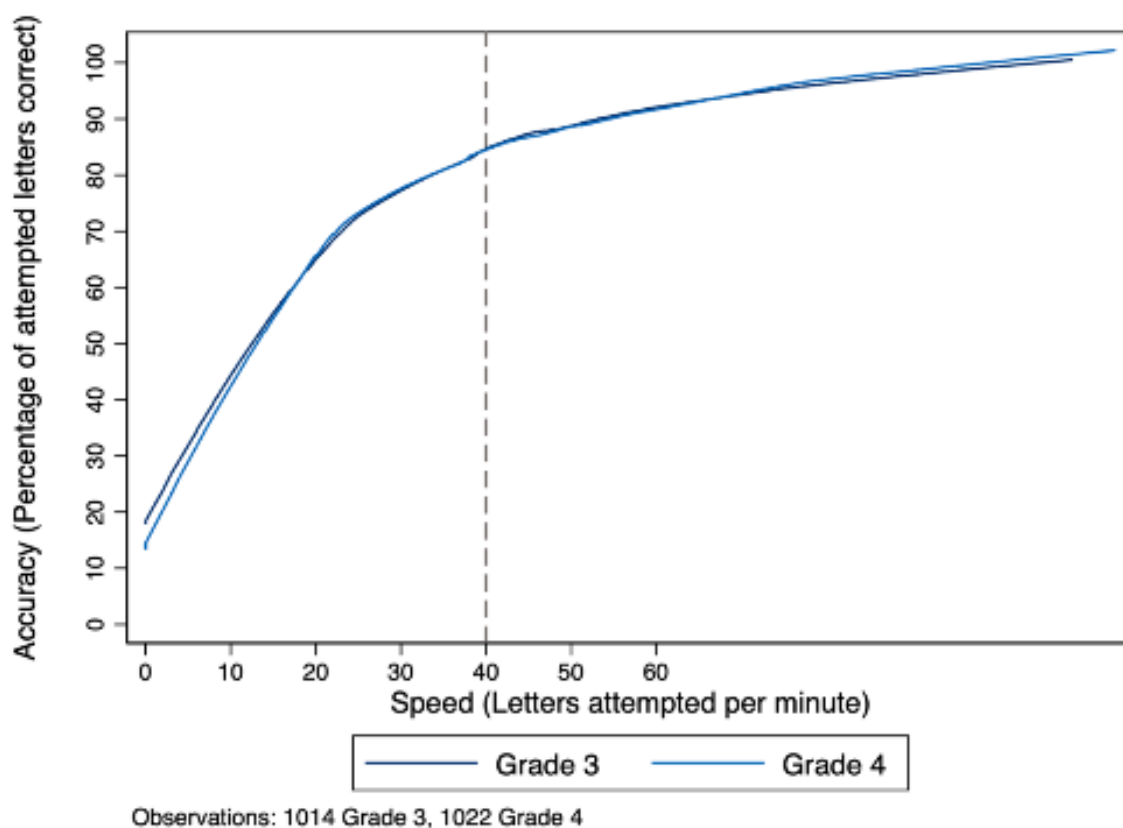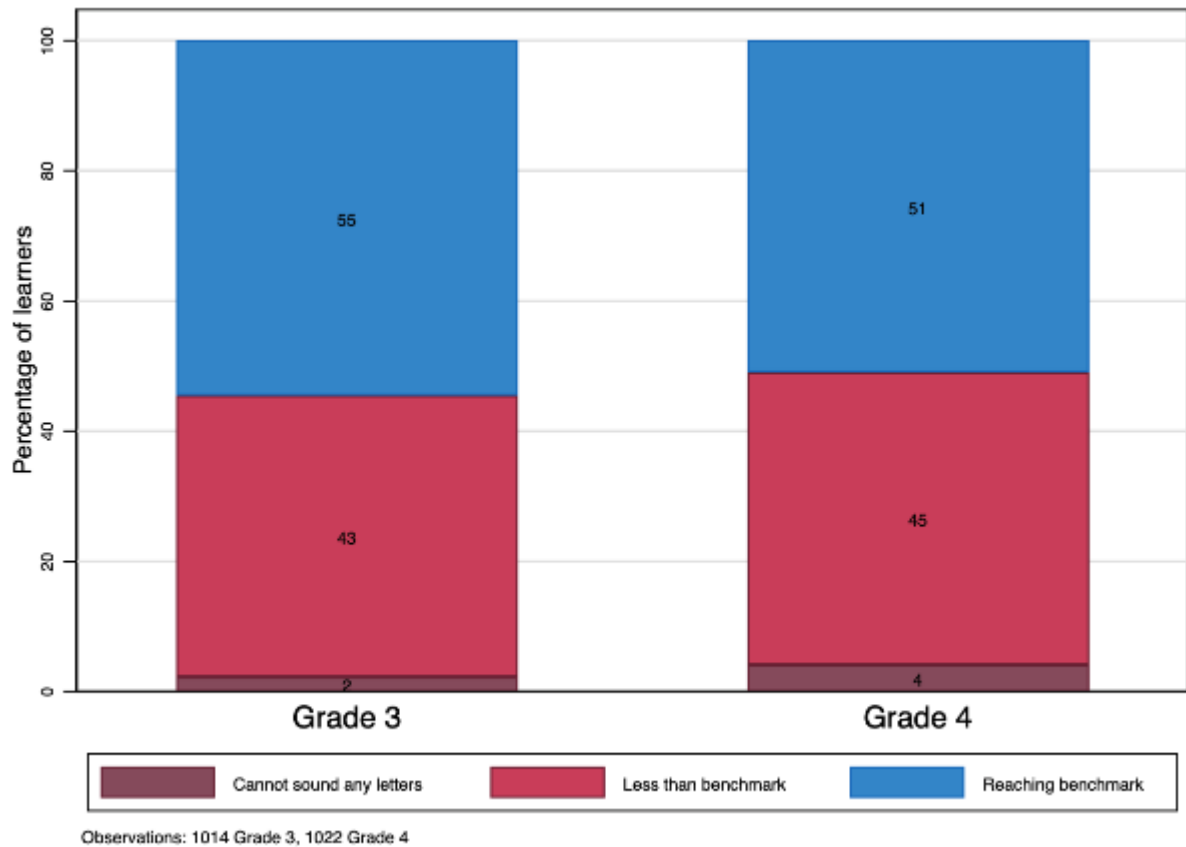*Figure 2: Letter-sound knowledge speed and accuracy*

Observations: 1014 Grade 3, 1022 Grade 4

Figure 3: Percentage of learners reaching the letter-sound benchmark

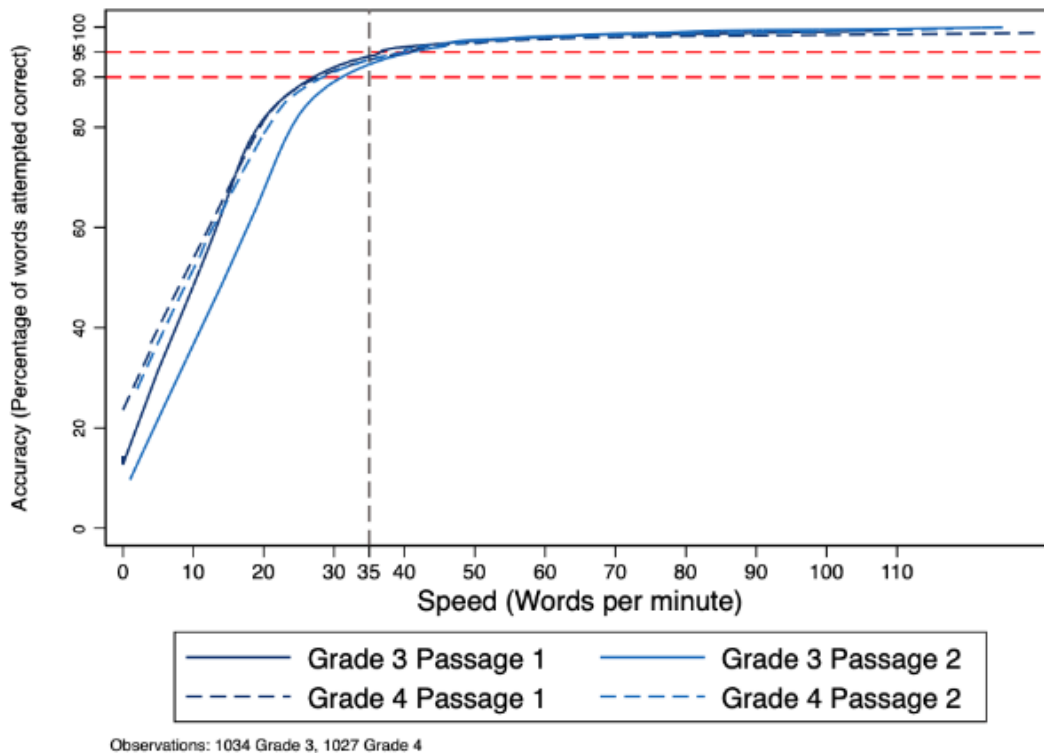Observations: 1014 Grade 3, 1022 Grade 4

Performance in relation to the letter-sound benchmark is shown in Figure 3. Learners are classified as i) unable to sound one letter, 2) not reaching the benchmark, or 3) reaching the benchmark. The figure shows that just over half of Tshivenḓa learners in both Grade 3 and Grade 4 reached the benchmark of 40 correct single letter-sounds per minute. This performance profile mimics the results obtained in the Sepedi benchmarking study, where 56% of pre-pandemic Grade 2 learners and 55% of post-pandemic Grade 3 learners reached this benchmark (Ardington et al., 2021a). For Setswana, by the end of Grade 2, 53% of pre-pandemic learners reached the benchmark, whilst 63% of post-pandemic end-of-year Grade 3 learners reached the benchmark. Note, however, that the Setswana letter-sound assessment was harder in the pre-pandemic assessment as it included the complex consonants and diacritics (Wills et al., 2022b).

8.2 Reading speed and accuracy (Grades 3 and 4)

Across both grades and all passages, we observe a consistent pattern in the speed-accuracy relationship. Accuracy and speed increase steeply together. Then, the relationship tends to flatten off when accuracy levels reach around 92-94% or when the learner is reading 35 correct words per minute (represented by the grey dotted line). For example, in both Grade 3 and Grade 4, learners reading 20 words per minute are getting every second word incorrect. Accuracy improves steeply with speed so that learners reading 30 words per minute achieve an accuracy level of 90%. After 40 words, we see little changes in accuracy with increasing speed, suggesting that an accuracy benchmark has been reached.

Observations: 1034 Grade 3, 1027 Grade 4

8.3 Fluency and comprehension (Grades 3 and 4)

Figure 5 presents the relationship between ORF (the number of correct words per minute from a passage) and oral reading comprehension (the comprehension score among learners who attempted at least 70% of the comprehension questions).

The fluency-comprehension relationship is similar for Grade 3 and 4 learners, with comprehension scores increasing steeply with fluency initially and then flattening out at around 35 *cwpm*. Grade 3s perform similarly in both passages, whilst Grade 4s do better in the first passage than the second. Nonetheless, Grade 3 and Grade 4 learners reading slower than 35 cwpm are achieving poor comprehension outcomes. Below 35 *cwpm*, it seems that working memory is dedicated to effortful decoding, leaving little room for engaging with the meaning of the text. This supports the analysis that 35 *cwpm* should be the minimum Tshivenḓa reading benchmark that learners achieve by the end of Grade 2.

Figure 5: Grade 3 and 4 data: Relationship between ORF and comprehension for learners attempting at least 70% of comprehension questions

Observations: 809 Grade 3, 830 Grade 4
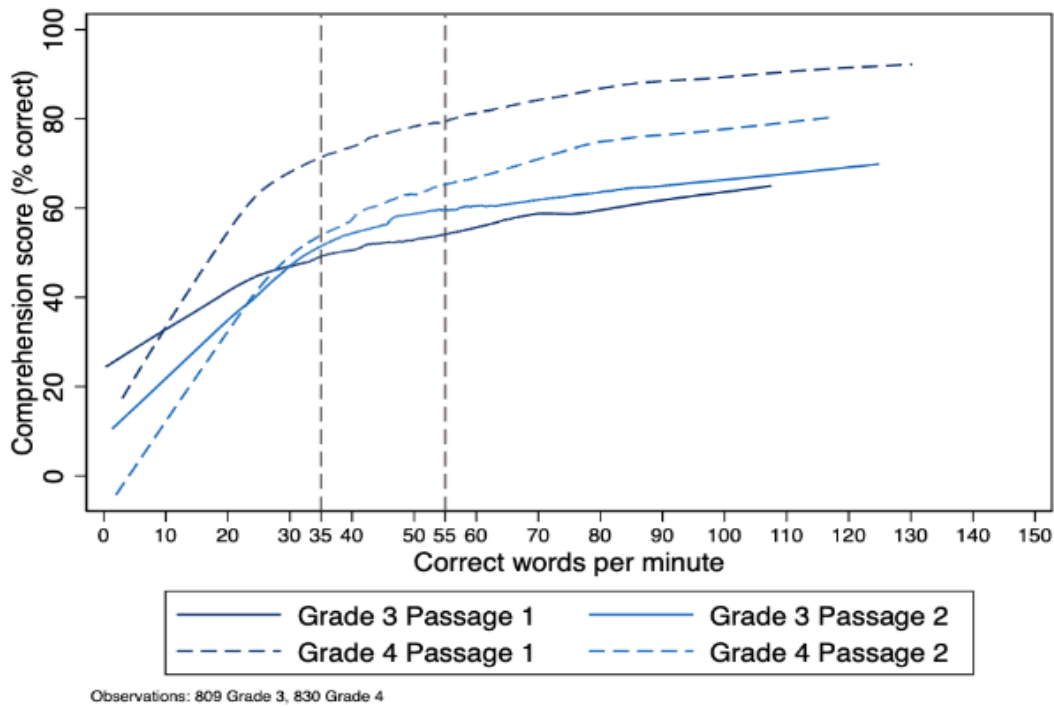
8.4   Fluency and comprehension (Grade 7)

The Grade 7s' comprehension skills in both their oral and written comprehension tests increase with fluency (Figure 6). The oral comprehension increases linearly (in a nearly flat line), whilst the written comprehension tests initially increase sharply with fluency and then begin to flatten off. At 90 *cwpm*, Grade 7s achieve written comprehension scores of about 65%.
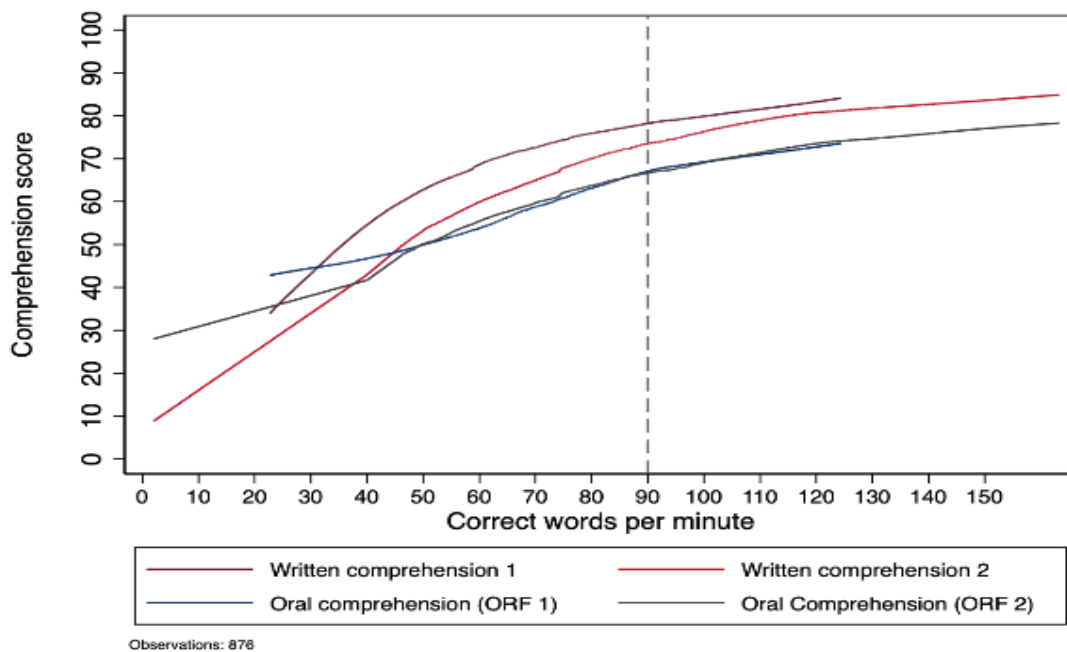

Observations: 876

Figure 6: Relationship between fluency and written comprehension, Grade 7

9   TEACHER EXPERIENCE

To better understand the learner results, a survey was conducted among teachers focusing on qualifications, resource availability, and reading practices in Tshivenḓa Home Language (HL) and English First Additional Language (EFAL) teaching. From 62 schools, 226 responses were gathered, revealing information from a mix of schools of various sizes, categories and quintiles.

On average, teachers in the sample were 47 years old with about 14.7 years of experience. A significant 40% held positions in the school management team. Interestingly, Grade 7 teachers had more experience than Grade 4 teachers. About half the teachers were teaching grades that matched their training phase. In terms of qualifications, 45% of the teachers had postgraduate degrees/certificates. However, concerning literacy, 46% of Tshivenḓa teachers were not specifically trained in teaching this skill, and 47% of Tshivenḓa teachers had not undergone literacy training in the last two years.

9.1   Resourcing in schools

The study examined classroom resource availability, focusing on workbooks, readers, and libraries. Teachers rated resource availability as a significant, big, small, or non-issue. Results showed that while workbooks were generally available, 30% of Tshivenḓa HL teachers and 24% of EFAL teachers saw their provision as problematic. Over 70% of teachers in both groups cited the lack of readers or library books as a major issue. When these resources were available, they were frequently utilised.
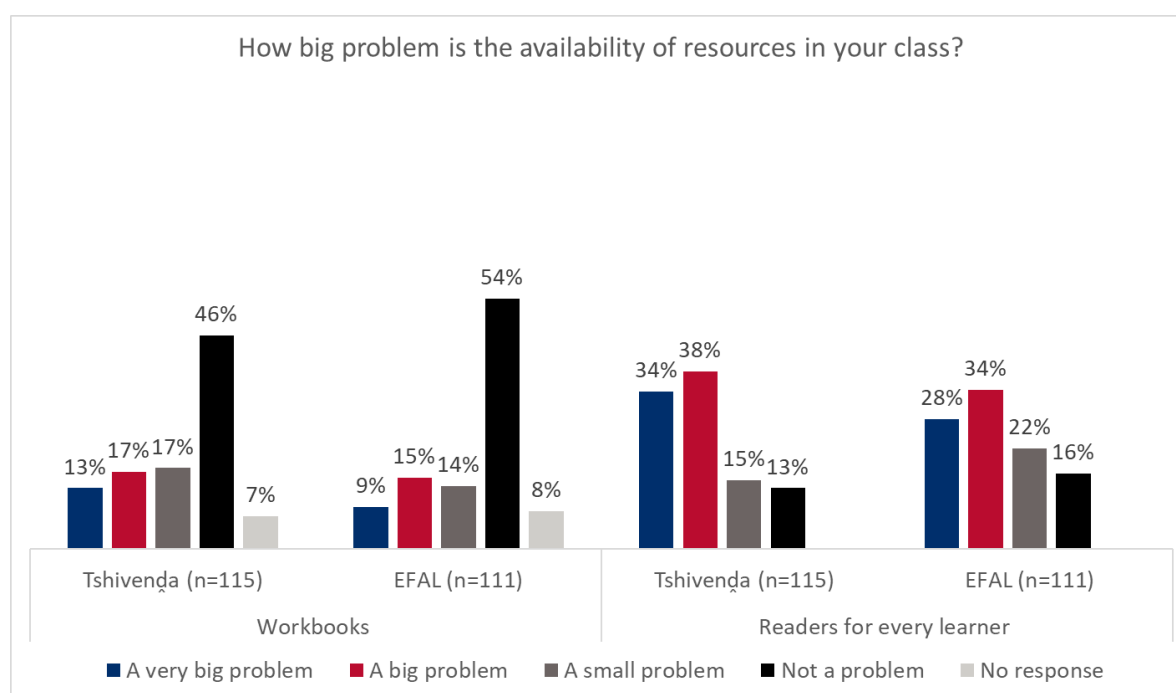
Workbooks and Readers

Figure 7: Availability of resources in class.

Do you have these reading resources in your class?

	Tshivenḓa (n=115)	EFAL (n=111)	Tshivenḓa (n=115)	EFAL (n=111)	Tshivenḓa (N=115)	EFAL (n=111)
No	57%	55%	71%	81%	84%	77%
Yes	43%	45%	18%	19%	14%	22%

Do you have graded readers in your classroom? | Do you have a classroom library/reading corner in your classroom | Does your school have a library where your learners are able to take books home?
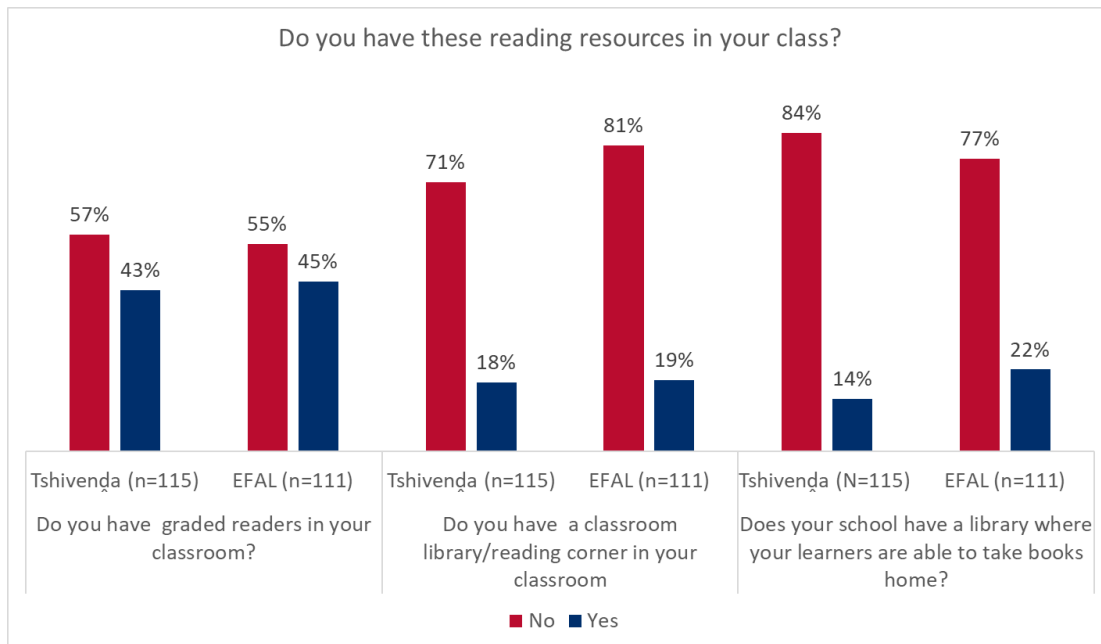
Figure 8 Reading Resources

A composite resource constraint score was devised at the school level to understand the broader resource challenge. This score considered five indicators: availability of workbooks, readers, graded readers, classroom libraries, and school libraries. From this, schools were categorised as least constrained to most constrained. The findings revealed that 58% of schools were significantly or highly constrained. Resource constraints were not significantly different across school quintiles but were prominent in medium-sized schools, suggesting a need for targeted resource allocation for these schools.

9.2   Teaching practices

The survey assessed language practices among Grade 4 and Grade 7 Tshivenḓa HL teachers. For both grades, read-aloud is the predominant classroom activity, with 39% of Grade 4 and 34% of Grade 7 teachers engaging in it daily. Roughly 90% of Tshivenḓa teachers integrate various reading methods, like group-guided and shared reading, at least weekly. However, creative writing and written comprehension are less frequent tasks. Interestingly, teachers, especially those with lower qualifications, found creative writing the most challenging to teach, potentially illustrating the Dunning-Kruger effect, where limited knowledge may lead to overconfidence. Approximately 25% of Grade 4 teachers focus on phonics daily, while 76-80% of both grade levels assign creative writing weekly. Written comprehension is less common, with 72% of Grade 4 and 68% of Grade 7 teachers practicing it weekly. Tshivenḓa teachers infrequently incorporate English in their lessons, with teachers holding advanced degrees using it even less.

9.3   Impressions on learners' reading ability

On the whole, the surveyed teachers had more confidence in learners' ability to read Tshivenḓa than in EFAL. In Tshivenḓa, 71% in grade 4 and 77% of teachers in Grade 7 mentioned that most of their learners in class can read adequately. 48% of Grade 4 EFAL teachers mentioned that half of their learners in class could read adequately, and 30% of the teachers mentioned that there are still many learners in their classes that are struggling to read. Forty-four per cent (44%) of the Grade 7 EFAL teachers mentioned that most of the learners in their classes can read adequately, while 29% of the

teachers mentioned that many learners are still struggling to read. Those teachers with higher qualifications were more likely to be critical of their learners' reading ability.KEY INSIGHTS

Besides providing the data to propose the grade-specific reading benchmarks, three key insights are gleaned from the research.

Learner Performance:

Tshivenḓa learners face difficulties in reading complex consonants and diacritics, with a significant percentage unable to read them. Despite improvements in reading fluency as they progress through grades, many learners do not achieve the set benchmarks. This indicates a need for targeted interventions to help learners overcome these challenges and reach their grade-level benchmarks.

Perception of Student Proficiency:

While teachers generally felt confident about their learners' reading abilities in Tshivenḓa, they expressed lower confidence in learners' EFAL skills. Notably, teachers with advanced educational qualifications tended to have a more critical view of learners' reading proficiency, suggesting a possible disparity between teacher perceptions and actual learner capabilities.

Teacher Training and Resources:

A considerable number of teachers lacked specific literacy training in Tshivenḓa. Furthermore, there is a significant shortage of educational resources, with a majority of schools being resource-constrained, particularly in terms of reading and library materials.

10 RECOMMENDATIONS

Tshivenḓa HL benchmarks should be integral to a national system for monitoring early-grade reading skills. Every early grade reading initiative must prioritise rigorous data collection from the outset to enrich datasets on Tshivenḓa reading.

As datasets grow, existing standards should be revisited. EGRA-type evaluations need to be pivotal in formative assessments across primary school phases.

Equipping educators with knowledge and tools for these assessments and interpreting results is vital, necessitating incorporation into preservice training and continuous professional growth. Best practices based on evidence should underpin new assessment methods.

Teachers must be proficiently trained, especially in EGR, encompassing techniques for enhancing oral language, rectifying decoding errors, fostering reading fluency, and ensuring comprehension.

There is an immediate need to supply reading materials, especially to medium-sized schools, for both Tshivenḓa and EFAL. Tshivenḓa reading resources should consistently be a policy and budgetary focus, considering a collaborative, multi-sectoral approach. A swift resource allocation for expansive reading initiatives in Tshivenḓa schools is crucial.

Assessing the efficacy of existing programs will guide early-grade reading (EGR) strategies. In-depth research on Tshivenḓa linguistics and optimal teaching methods is essential.

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