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BENCHMARKING EARLY GRADE READING SKILLS IN SOUTH AFRICA: ENGLISH FIRST ADDITIONAL LANGUAGE

Summary Report

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Photo: Teaching early grade literacy, Mogokonyane Primary School, North West Province, South Africa Photo credit: Khulisa Management Services

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ACRONYMS

| cwpm | correct words per minute |
|--------|--|
| clspm | correct letter sounds per minute |
| CAPS | Curriculum and Assessment Policy Statement |
| DIBELS | Dynamic Indicators of Basic Early Literacy Skills |
| DBE | Department of Basic Education |
| EC | Eastern Cape |
| EFAL | English First Additional Language |
| EGRA | Early Grade Reading Assessment |
| EGRS | Early Grade Reading Study |
| ESL | English Second Language |
| HL | home language |
| LFL | Leadership for Literacy |
| LOLT | language of learning and teaching |
| FW | Funda Wande |
| KZN | KwaZulu-Natal |
| LP | Limpopo Province |
| LSK | letter sound knowledge |
| MP | Mpumalanga Province |
| NW | North West |
| ODH | orthographic depth hypothesis |
| ORF | oral reading fluency |
| RC | reading comprehension |
| PGST | psycholinguistic grain size theory |
| PIRLS | Progress in International Reading and Literacy Study |
| RSP | Reading Support Project |
| SPS | Story Powered Schools |
| SVR | simple view of reading |
| | |

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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: 72067421F00001.

This report derives from the 2021 data collection and analysis for the EGRS I (wave 5 data), the RSP Impact Evaluations and the Language Benchmarking Study in two districts in North West Province, South Africa.

A number of reports have been published under this task order and are useful as background.

- Methodology Plan and Study Protocol: Data Collection and Analysis for the EGRS, RSP and Benchmarking. <u>https://pdf.usaid.gov/pdf_docs/42132810ec2c48809efe8ca11e155aff.pdf</u>
- For the full instrument development process refer to the "Report on the Development of Learner Assessment Tools and Contextual Tools" <u>https://pdf.usaid.gov/pdf_docs/PA00ZF14.pdf</u>
- The Quality Assurance Surveillance Protocol (QASP) documents the quality assurance elements of both data collection and analysis. <u>https://pdf.usaid.gov/pdf_docs/PA00Z8SX.pdf</u>
- Task Order 4 Data Collection and Analysis EGRS, RSP, Benchmark and COVID-19: Fieldwork Report <u>https://pdf.usaid.gov/pdf_docs/e4563ed819164a79956698c3a1998964.pdf</u>

As part of this task order, Khulisa conducted additional research on COVID-19 in the schools and two reports were provided. The Preliminary COVID-19 Report submitted in 2021 enabled the DBE to consider the policy implications to prepare for the 2022 school year. https://pdf.usaid.gov/pdf_docs/PA00XGST.pdf. Thereafter, the Consolidated Final COVID-19 Report was submitted in 2022 https://pdf.usaid.gov/pdf_docs/PA00XGST.pdf.

The EGRS I Impact Evaluation report is available <u>https://pdf.usaid.gov/pdf_docs/PA00ZF11.pdf</u> and on the Department of Basic Education Research Repository. <u>https://www.education.gov.za/ResearchRepository.aspx</u>. Further reports on the EGRS are available on the Department of Basic Education website <u>https://www.education.gov.za/Programmes/EarlyGradeReadingStudy.aspx</u>.

Data was analyzed to recommend Setswana Home Language (HL) reading benchmarks and English First Additional Language (EFAL) reading benchmarks. The Technical Report is available at https://pdf.usaid.gov/pdf_docs/68be72e5e23d4a21b3636377cf8c3418.pdf, and the Summary Reports and Learning Briefs for Setswana HL and EFAL 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/ResearchRepository.aspx.

The methodology for Setting Reading Benchmarks In South Africa is outlined in this report <u>https://pdf.usaid.gov/pdf_docs/PA00XINZ.pdf</u>.

The data used for this work was based on studies funded by the Department of Basic Education, USAID, Zenex Foundation, UNICEF, the Allan Gray Orbis Foundation Endowment, and the Economic and Social Research Council.

INTRODUCTION

In this report, we outline minimum standards for reading in English First Additional Language (EFAL) in the primary grades in South Africa, summarising key findings pertaining to EFAL from the technical report "Benchmarking early grade reading skills: Setswana and English First Additional Language".

We highlight in this summary report the minimum oral reading fluency (ORF) benchmarks to be met by all EFAL learners at the ends of Grades 2 to 6. These benchmarks guide teachers, officials, and parents to track and assess learners' reading development in EFAL in the Foundation Phase (Grade I to 3) and into the Intermediate Phase (Grade 4 to 6) of schooling in South Africa.

Oral reading fluency (ORF) refers to the ability to read words in context with speed and accuracy.

- Accuracy refers to the percentage of words attempted that are read correctly from a given text;
- Speed reflects the number of words that are attempted from a given text in a time period.

When considered together as fluency, this is measured as the number of correct words per minute (abbreviated as 'cwpm') read from a passage of text. Fluency can be assessed by teachers and officials using Early Grade Reading Assessments (EGRAs).

See footnote¹

WHY IS ASSESSING READING FLUENCY AND DEVELOPING FLUENCY IN EFAL IMPORTANT?

The South African school curriculum requires that children can read for meaning in both their home language and English by the end of the Foundation Phase, which aligns with the end of Grade 3. To read with understanding in African languages or English, various foundational reading subskills need to be mastered before children can, when reading on their own, comprehend (or understand) what is in a text. For example, knowledge is required of the written 'code' of the language in which learners are reading, which we refer to as decoding skills. Decoding skills can include knowledge of letter sounds or reading isolated words. Decoding culminates in being able to read connected words from a text or passage with high levels of accuracy and sufficient speed. Fluency, in turn, can support the development of both lower and higher order comprehension skills because as accuracy and speed increase, this leads to automaticity in processing. This frees up working memory and attention for meaning construction. The arrow in Figure 1 depicts the direction of this developmental trajectory.²

¹ Fluency can also incorporate reading with prosody which reflects how natural reading sounds (how it conforms to speech rhythms and intonation patterns and reflects punctuation conventions). It is very important for teachers to be aware of whether learners read with prosody, but measuring prosody requires subjective judgements, and this can be difficult to apply in large-scale in-field studies.

² The points or thresholds at which accuracy or increased alphabetic knowledge lead to automaticity in word reading (in or out of context), thereby enabling reading comprehension, may differ across languages depending on their linguistic and orthographic features.



To identify if learners are developing decoding skills, they need to be assessed one-on-one, with suitable reading assessments. If not, decoding problems can go unnoticed, with undeveloped decoding skills showing up only later in very poor written reading comprehension.

WHAT ARE READING BENCHMARKS?

Reading benchmarks provide standards against which teachers can measure learners' decoding skills. Benchmarks are numerical measures of proficiency in fluency which can be used to monitor whether children are on track to be able to read with fluency and understanding. Benchmarks can also be used for early identification of learners who are at risk of not learning to read for meaning by age 10, highlighting where effective remediation should take place (Jukes et al. 2020).

In recent years, the Department of Basic Education and various stakeholders have been working to establish benchmarks in African home language reading subskills with benchmarks published for Nguni languages (Ardington et al., 2020, 2021) and Sotho language benchmarks to follow. However, it is not sufficient to merely establish standards in home language reading. In South Africa, an African home language serves as the language of learning and teaching (LOLT) until Grade 3 (or end of the Foundation Phase) in most schools. Then the LOLT switches to English from Grade 4 while home language instruction continues. About 90% of learners are instructed in English from Grade 4 onwards.³

Although norms and benchmarks for reading exist for English first language speakers and fluency norms are documented for second language reading in the United States (for example, Hasbrouck & Tindal, 2006 & 2017; University of Oregon, 2021), countries may take a more nuanced approach to setting benchmarks for second language reading in English. The reason is that there is limited evidence on how English reading among second language speakers develops in developing country multilingual education contexts. English reading development may also occur slowly in some developing country contexts, such as South Africa.

HOW DID WE SET MINIMUM EFAL FLUENCY BENCHMARKS FOR THE SOUTH AFRICAN CONTEXT?

Through exploratory analysis of large-scale reading data, grounded in the theory of how reading develops in alphabetic writing systems for home language and second language readers, combined with expert consultation, we have developed minimum grade-specific oral reading fluency (ORF) levels in EFAL. To ensure that the established minimum EFAL fluency benchmarks are contextually relevant for South African learners, we compiled the largest existing source of data on South African learners' reading skills in EFAL for learners in no-fee schools⁴. Drawing on 5 different studies, data was compiled with multiple assessment points for over 20,000 unique learners from Grades 2-7,

³ Estimates from the Annual National Assessments of 2013. See https://www.bridge.org.za/wp-content/uploads/2016/06/SPAULL-2016-BRIDGE-reading-presentation.pdf

⁴ No fee schools cannot charge school fees. These are schools in quintiles 1 to 3, the system DBE used to rate schools according to the income, unemployment and literacy levels in a community. The system is used to determine public funding to schools

across 6 of 9 provinces. These data are almost exclusively drawn from no-fee schools, resulting in benchmarks relevant to millions of South African learners in no-fee schools.⁵

A two-stage process was followed in setting grade-specific minimum fluency benchmarks in EFAL. The first stage involves using empirical methods to identify critical reading points using data from multiple grades. The second stage involves aligning these points to specific grades. We describe these processes in the sections below.

STAGE-ONE: IDENTIFYING A CRITICAL FLUENCY 'THRESHOLD' AND BENCHMARK IN SETSWANA EARLY GRADE READING

Traditional approaches to benchmarking reading subskills often focus on identifying a single point or benchmark where decoding skills are sufficiently established to support comprehension (Abadzi, 2012). However, drawing on a 'threshold hypothesis' by Wang et al. (2019), reaching fluency levels as defined by a benchmark may only be attainable once a minimum threshold of proficiency in fluency has developed (Paris & Hamilton, 2011). Achieving a 'threshold' does not guarantee further development but not achieving a 'threshold' will certainly inhibit it. This is different from a benchmark, which reflects a more developed level of skill. In a two-stage process to establish minimum grade-specific fluency benchmarks, we first use empirical methods and multiple grades of reading data to identify a critical 'threshold' and 'benchmark' in a reading skill that is non-grade specific (stage-one). The second stage involves aligning the overall 'threshold' and 'benchmark' to specific grades by examining how attainable they are and how they align with curriculum requirements.

In stage one, a critical 'threshold' and 'benchmark' are identified by examining the relationship between accuracy and speed in reading, and thereafter the relationship between fluency and reading comprehension.

- Accuracy in recognising letters and words has been shown to develop first, and once accuracy is established, reading rates increase as children's mastery of reading increases (Fuchs et al., 2001; Spear-Swerling, 2006, Deno et al., 2001). However, the nature of these relationships has been understudied in South African languages and second language reading. We examine the relationship between accuracy and speed and then fluency and comprehension in EFAL reading, acknowledging that accuracy develops more slowly in the opaque orthography of English than in transparent orthographies (such as African languages) (Katz & Frost, 1992), and when reading in a second language, such as English.
- We are sensitive not to impose assumptions about what these relationships look like in EFAL, and rather rely on a non-parametric analysis of empirical regularities and reading trajectories to identify critical thresholds and benchmarks in fluency.

Our exploratory analysis of empirical regularities across large-scale EFAL reading data reveals that below 50 words per minute, EFAL reading speeds are not only slow, but reading is still highly

⁵ English assessment data is compiled from the following studies: The First Early Grade Reading Study (EGRS I), Reading Support Project (RSP), Story Powered Schools (SPS), Leadership for Literacy (LFL), Funda Wande in Limpopo (FW LP) and the second Early Grade Reading Study (EGRS II) (For more information on these datasets see Menendez & Ardington, 2018; Wills & van der Berg, 2020; Ardington & Henry, 2021; Department of Basic Education & University of Witwatersrand 2020).

inaccurate. This is seen in Figure 2, which shows the relationship between reading speed and accuracy for different study samples by grade and passage read. Once learners start reading at speeds of around 50 words per minute, higher levels of accuracy (85% or more) are achieved.





Source: EGRS I = first Early Grade Reading Study; EGRS II = second Early Grade Reading Study; FW LP = Funda Wande in Limpopo; LFL = Leadership for Literacy; RSP = Reading Support Project; SPS = Story Powered Schools study. Own calculations. Notes: The relationship between speed and accuracy is displayed using locally weighted polynomial regressions

The box plot of Figure 3 then confirms that very few learners read with 85% accuracy (i.e., get 85 of every 100 words correct)⁶ reading at speeds less than 50 words per minute. In the analogous figure of inaccurate readers (less than 85% accuracy), the majority are reading at speeds less than 50 words attempted per minute (see Figure 4) (although the LFL samples are an exception). This supports the idea that learners who read less than 50 words per minute have not yet reached accuracy levels to support automaticity.

⁶ As a departure from the home language benchmarking analyses for Setswana and Nguni languages – which are transparent languages - we use 85% as a signal for developed accuracy in the early grades in EFAL reading, rather than 95%. The reason is that children learning to read in transparent orthographies do so more quickly and achieve greater accuracy more quickly than children learning to read in English (Seymour et al. 2003).⁶ Furthermore, accuracy is likely to be achieved later in a second language.



Figure 3 Speed distribution for learners reading with at least 85% accuracy in EFAL

Source: EGRS I = first Early Grade Reading Study; EGRS II = second Early Grade Reading Study; FW LP = Funda Wande in Limpopo; LFL = Leadership for Literacy; RSP = Reading Support Project; SPS = Story Powered Schools study. Notes: The lower and upper line of the box indicate the 25th and 75th percentile – i.e., 50% of each learner sample have English reading speeds in this band. The median is indicated by the line in each box. We consider what these distributions look like where accurate readers are distinguished from non-accurate readers using an 85% accuracy cut-off points. Own calculations.



Figure 4 Speed distribution for learners reading with at less than 85% accuracy in EFAL

Notes: See notes to figure above.

Even if learners get all words correct when reading at speeds below 50 words per minute, they are reading too slowly to grasp the meaning of what they read. This is seen in Figure 5, which plots the relationship between fluency and comprehension for samples by grade and passage read. When learners get 50-89 words per minute, comprehension shifts into a development zone, where typically learners correctly answer about 4 to 6 of every 10 comprehension questions about a passage. By the time learners are reading 90 correct words per minute (cwpm), comprehension has reached much higher levels. Across various grades and passages, we typically find that only learners reading at or above 90 cwpm are getting most questions correct about the passage they have read. Reaching 90 cwpm in EFAL is also predictive of higher levels of written reading comprehension performance in EFAL in higher grades. However, Figure 5 also shows that comprehension improvements tend to diminish above 90 cwpm agreeing with international research that finds that once decoding reaches 80 to 100 cwpm, fluency may be less useful at discriminating across good and poor comprehenders (Wagner 2011:88).



Figure 5 Relationship between fluency and comprehension for samples completing a sub-set of all comprehension questions, EFAL

Source: EGRS I = first Early Grade Reading Study; EGRS II = second Early Grade Reading Study; FW LP = Funda Wande in Limpopo; LFL = Leadership for Literacy; RSP = Reading Support Project; SPS = Story Powered Schools study. Own calculations. Notes: The relationship between speed and accuracy is displayed using locally weighted polynomial regressions

From this exploratory analysis, we identify two critical fluency points in EFAL: a fluency threshold of 50 cwpm, and a benchmark of 90 cwpm. Using longitudinal data, we find that meeting the fluency threshold is predictive of meeting the fluency benchmark in a later grade. This is shown in Figure 6, which identifies the fluency profile of Grade 7 learners in the EGRS I study in North West province, distinguished by whether learners fall into one of three fluency categories in Grade 4: non-readers (0 cwpm), reading below the threshold (1-49 cwpm) and meeting the fluency threshold (50-89 cwpm). Of Grade 4 non-readers, by the time they get to Grade 7, 44% are still not reading one word correctly in English, another 34% read slower than the threshold of 50 cwpm, 22% (17 + 5%) are meeting the threshold, and just 5% are meeting the benchmark. Of learners reading below the threshold in Grade 4, most are reading below the benchmark of 90 cwpm by the end of Grade 7. However, the vast majority (87%) of those reading at or above the threshold of 50 cwpm by the end of Grade 7.



Figure 6 Fluency in Grade 7, by learners' fluency profile in Grade 4, EFAL (a North West Province sample)

Source: EGRS I = first Early Grade Reading Study. Own calculations. Notes: Learners reaching 90 cwpm in Grade 4 are excluded from the figure.

STAGE TWO: ALIGNING THE CRITICAL THRESHOLD AND BENCHMARK POINTS TO SPECIFIC GRADES

Although both a threshold and benchmark in early grade reading are identified through the above analytical process using data from multiple grades, they need to be translated into grade-specific benchmarks. In doing this, they should not be set to be out of reach of most learners, while at the same time they should encourage reading development to a level more appropriate for the demands of the Curriculum.

In particular, we align the critical fluency points to grades by:

 Investigating their attainability against current South African sample reading norms. Figure 7 shows the percentage of learners unable to read one word in English (ORF = 0), reading below the threshold of 50 cwpm, reading between the threshold and benchmark (50-89 cwpm) and meeting the benchmark (90 cpwm) for samples ordered by study, grade and term.



Figure 7 Fluency profiles in EFAL by grade (excluding repeaters), various samples from 6 provinces

Source: EGRS I = First Early Grade Reading Study (North West province); EGRS II = Second Early Grade Reading Study (Mpumalanga); FW = Funda Wande (Limpopo) LFL = Leadership for Literacy (KwaZulu-Natal, Gauteng, Limpopo); RSP = Reading Support Project (North West Province); SPS = Story Powered Schools (KwaZulu-Natal and Eastern Cape). Own calculations

2. Carefully evaluating the critical threshold and benchmark against grade-specific reading norms for English second language speakers from other international contexts. Drawing largely on United States literature, norms and benchmarks for first (L1) and second language (L2) speakers are summarised in Table 1, while Table 2 summarises Grade 2 or 3 benchmarks for English in some developing countries (RTI international, 2017).

When considered against reading norms of second language English speakers from other international contexts, and EFAL reading levels among South African learner samples in no-fee schools, the overall fluency benchmark of 90 cwpm in South Africa can be reasonably aligned with the Grade 5 level. We work forwards and backwards from this point to align the threshold and identify further benchmarks for Foundation (Grade 1 to 3) and Intermediate Phase (Grades 4 to 6) grades, starting with Grade 2 when learners are introduced to group-guided reading and ending with Grade 6, corresponding with the last year of the Intermediate Phase.

Table 1 English fluency norms from international studies: end of grade median fluency (50th percentile) or in the case of DIBELS the ORF associated with being at negligible or minimum risk of reading failure at the end of each grade

| Grade | Ll norms: Hasbrouck & Tindal 50 th percentile (H&T) (2017) | L1: University of Oregon, DIBELS (2021) Minimal risk | L1: University of Oregon, DIBELS (2021) Negligible risk | L2: 70% of Hasbrouck & Tindal (Anderson 1999) | L2: Hasbrouck & Tindal less 25 words (Jimerson et al., 2013) | L2: Broward Al | L2: Broward A2 | L2: Broward Bl |
|-------|--|--|---|--|--|----------------------|----------------------|----------------------|
| I | 60 | 39-75 | 76 | 42 | 35 | 43 | 43 | 46 |
| 2 | 100 | 94-127 | 128 | 70 | 75 | 44 | 52 | 69 |
| 3 | 112 | 4- 35 | 136 | 78 | 87 | 49 | 74 | 89 |
| 4 | 133 | 125-158 | 159 | 93 | 108 | 65 | 80 | 103 |
| 5 | 146 | 37- 56 | 157 | 102 | 121 | 85 | 89 | 104 |
| 6 | 146 | 141-159 | 160 | 102 | 121 | | | |
| 7 | 151ª | 4 - 63 | 164 | 106 | | | | |

Notes: *shading in light red – close to 90 cwpm benchmark, shading in light blue – close to 50 cwpm threshold. ^aThis comes from the original Hasbrouck and Tindal (2006) norms. There are no updated norms for Grade 7 in Hasbrouck and Tindal (2017).

Table 2 Grade 2/3 English fluency benchmarks set in some developing countries where English is largely a second language

| Grade | English benchmark | Percentage meeting benchmark |
|------------------|---|--|
| Ghana | 45 cwpm | 7% |
| Kenya | 30 cwpm (emergent) ^b 65 cwpm (fluent) | Grade 2: 30% (baseline) - 64% (endline) ^b 34% (baseline) |
| Liberia | 35–40 cwpm | 4% |
| Vanuatu | 45 cwpm (Grade 2) 45 cwpm (Grade 3) | 6% 23% |
| Papua New Guinea | 45 cwpm | 1% - 8% across regions |

Source: RTI International, 2017 pp 18-19, ^bPiper et al. 2018.

GRADE-SPECIFIC MINIMUM FLUENCY BENCHMARKS FOR EFAL LEARNERS IN SOUTH AFRICAN PRIMARY SCHOOLS

Following the two-staged analysis above, Figure 8 summarises minimum grade-specific fluency benchmarks for learners to develop adequate reading skills in what is typically the language of learning and teaching from Grade 4.



Figure 8 Grade-specific minimum benchmarks for early grade reading in EFAL

A Grade 2 minimum fluency benchmark: At the end of Grade 2, all EFAL learners should be reading grade-appropriate English passages with fluency levels at or above 30 cwpm.

- This should be viewed as an early stepping stone to reaching the EFAL fluency 'threshold' of 50 cwpm by the end of Grade 3. Reading at 30 cwpm is far too slow to support comprehension, yet it is predictive of whether learners can reach 50 cwpm a year later. Interestingly, 30 cwpm also aligns with Kenya's 'emergent' fluency benchmark at the Grade 2 or 3 level (Piper et al., 2018). In our large dataset we find very few learners reading less than 30 cwpm reaching the critical fluency 'threshold' of 50 cwpm (identified in stage-one) a year later (seen in Figure 9).
- By the end of Grade 2, the median fluency among learners in Mpumalanga is just 11 cwpm (see Table 3). However, among those who can read one word correctly, median fluency is 20 cwpm. Reading at 30 cwpm is not out of reach for South African learners by the end of Grade 2 if decoding skills are effectively taught.





Data source: Early Grade Reading Study II (EGRS II), own calculations.

Table 3 EFAL fluency norms and benchmarks at the end of each primary school grade among no-fee learner samples from 6 South African provinces

| Grade level | % unable to read one word correctly | Median fluency if non-readers are included in samples | Median fluency if non-readers are excluded from samples | EFAL fluency benchmarks to be met by <u>all</u> learners | % of non- repeating samples meeting fluency benchmark |
|----------------|---|--|--|---|---|
| 2 | 21 | П | 20 | 30+ | - |
| 3 | 19-34 | 13-34 | 27-45 | 50+ | 19-34% across samples |
| 4 | 8-30 | 21-46 | 44-50 | 70+ | - |
| 5 | 6 | 62 | 65 | 90+ | 29% (rural sample) |
| 6 | I-8 | 80-97 | 84-97 | 100+ | - |
| 7 | 9 | 89 | 95 | - | - |

Note: EGRA-type studies from 2017-2021

Sources: Own calculations from EGRS I, RSP, EGRS II, SPS, LFL and FW-LP. Notes: Reading progressions by grade are varied and not as uniform as expected due to varied text difficulty, variations in protocols used to administer assessments and due to the COVID pandemic related impacts on reading development with some assessments conducted in 2020 and 2021. ^b From Figure 7.

A Grade 3 minimum fluency benchmark: By the end of Grade 3, all EFAL learners should be reading grade-appropriate English passages at or above 50 cwpm.

- In stage one of the analysis, 50 cwpm was identified as a minimum 'threshold'. This threshold of 50 cwpm roughly aligns with English reading benchmarks set at the Grade 3 level in other developing countries (for example, Ghana, Papua New Guinea and Vanuatu, as seen in Table 2). When learners reach 50 cwpm, they start to derive a limited amount of meaning from what they are reading. Below 50 cwpm, learners cannot comprehend what they have read, revealed in very low oral or written comprehension scores.
- Reading at or above 50 cwpm is strongly associated with whether learners will be reading at the EFA critical benchmark of 90 cwpm in later primary grades. However, meeting the threshold of 50 cwpm is a necessary but not sufficient condition for reaching 90 cwpm. Decoding skills must be taught, and learners should practice reading daily to ensure that fluency develops further.
- By the end of Grade 3, between 19% and 37% of non-repeating learners across various samples had reached 50 cwpm (see Figure 7). Positioned as a Grade 3 minimum fluency benchmark, 50 cwpm is not out of reach for all learners. Yet we caution that far too many children (19-34% across samples) are currently not even able to read one word correctly in English by the end of Grade 3.
- Moving towards all Grade 3 second language English speakers reading at least 50 cwpm, will require a refocus on teaching and practising decoding skills in the Foundation Phase and ensuring that every child meets the Grade 2 minimum fluency benchmark of 30 cwpm.

A Grade 4 minimum fluency benchmark: By the end of Grade 4, all EFAL learners should be reaching 70 cwpm when reading grade-appropriate English passages.

- Although international English second language norms suggest that learners should be reading at 90 cwpm (critical benchmark from stage one) by the end of Grade 3 or 4 (Anderson, 1999; Jimerson et al. 2013), realistically, this is currently not within reach for all South African learners. Among learner samples from no-fee schools in Mpumalanga, the Eastern Cape (EC), KwaZulu-Natal (KZN) and North West (NW) province, just 8-15% meet the benchmark of 90 cwpm by the end of Grade 4 (see Figure 7).
- We, therefore, propose a lower development benchmark of 70 cwpm for the end of Grade 4. This a stepping stone to reaching the EFAL benchmark of 90 cwpm by the end of Grade 5.
- Achieving a target where all learners are reading at least 70 cwpm by the end of Grade 4 will require significant increases in fluency in earlier grades. Across samples, median fluency at the end of Grade 4 ranges from 21-46 cwpm, or 44-50 cwpm if non-readers⁷ are excluded from samples.

A Grade 5 minimum fluency benchmark: By the end of Grade 5, all EFAL learners should be reading grade-appropriate passages at or above 90 cwpm.

- In stage one of the analysis, 90 cwpm was identified as a critical 'benchmark. Reading at this fluency level is necessary to be able to reach higher levels of comprehension.
- However, fluency levels at or above 90 cwpm are necessary but not sufficient to support improvements in comprehension.
- This milestone signals the point at which learners become receptive to the teaching of the skills and strategies they need to tackle written comprehension and teachers should continue to encourage vocabulary and language development.
- By the end of Grade 5, 29% of non-repeating learners from rural no-fee school samples in KZN or the EC meet the benchmark of 90 cwpm and median fluency is 62 cwpm.

A Grade 6 minimum fluency benchmark: By the end of Grade 6, all EFAL learners should be reaching 100 cwpm when reading grade-appropriate English passages.

- In international studies, fluency in English second language of around 100 cwpm is typically reported at the 50th percentile in Grades 5-6. For home language English speakers in the United States, however, fluency at the 50th percentile among sixth-grade students is around 146 cwpm (Hasbrouck & Tindal, 2017).
- In South African samples, median fluency ranges from 80-97 cwpm, so that 100 cwpm is attainable if fluency levels are strengthened in earlier grades in line with grade-specific minimum fluency benchmarks.

Although a Grade 7 minimum fluency benchmark has not been provided, fluency and comprehension skills should also continue to be taught and encouraged into the final year of primary school as

⁷ Unable to read one word correctly.

reading development for many learners is very slow. For example, by the end of primary school (Grade 7), 39% of the EGRS I learner sample in North West province do not meet the Grade 5 minimum EFAL fluency benchmark of 90 cwpm. About 13% are reading below the Grade 3 minimum EFAL fluency threshold of 50 cwpm, indicating that they are reading too slowly to be in a zone where they can understand much at all.

CONCLUSION

While these grade-specific minimum EFAL fluency benchmarks may be criticised as being too low by international standards, it is important to qualify that we are not presenting these as desired levels of learner performance at the 50th or 75th percentile. **Rather, they reflect minimum fluency levels to be attained by all learners in no-fee schools by the end of each grade**. As reading improves in the future, these proposed grade-specific minimum EFAL fluency benchmarks should be shifted upwards with respect to grades. In schools or classes where EFAL reading development occurs faster, teachers and parents can refer to available international English fluency norms as guides (see Table 1). For example, in the United States, at the Grade 6 level, 141-159 cwpm is a fluency range at which learners are at minimal risk of reading failure and the corresponding range at the Grade 3 level is 114-135 cwpm (University of Oregon, 2021:123).

We also emphasise that reaching these contextually relevant minimum EFAL fluency benchmarks should not be viewed in isolation from reaching home language reading benchmarks.⁸ The development of decoding skills in African home language reading provides an important foundation for learning to read in English as both African languages and English are alphabetic languages. The Curriculum and Assessment Policy Statement (CAPS) for EFAL develops from the assumption that when children begin to read and write in their additional language, they already know how to decode in their home language. It assumes that they have grasped concepts of print and have prior knowledge of sound-spelling relationships (DBE, 2011).

⁸ See Ardington et al., (2020, 2021) for Nguni language benchmarks.

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