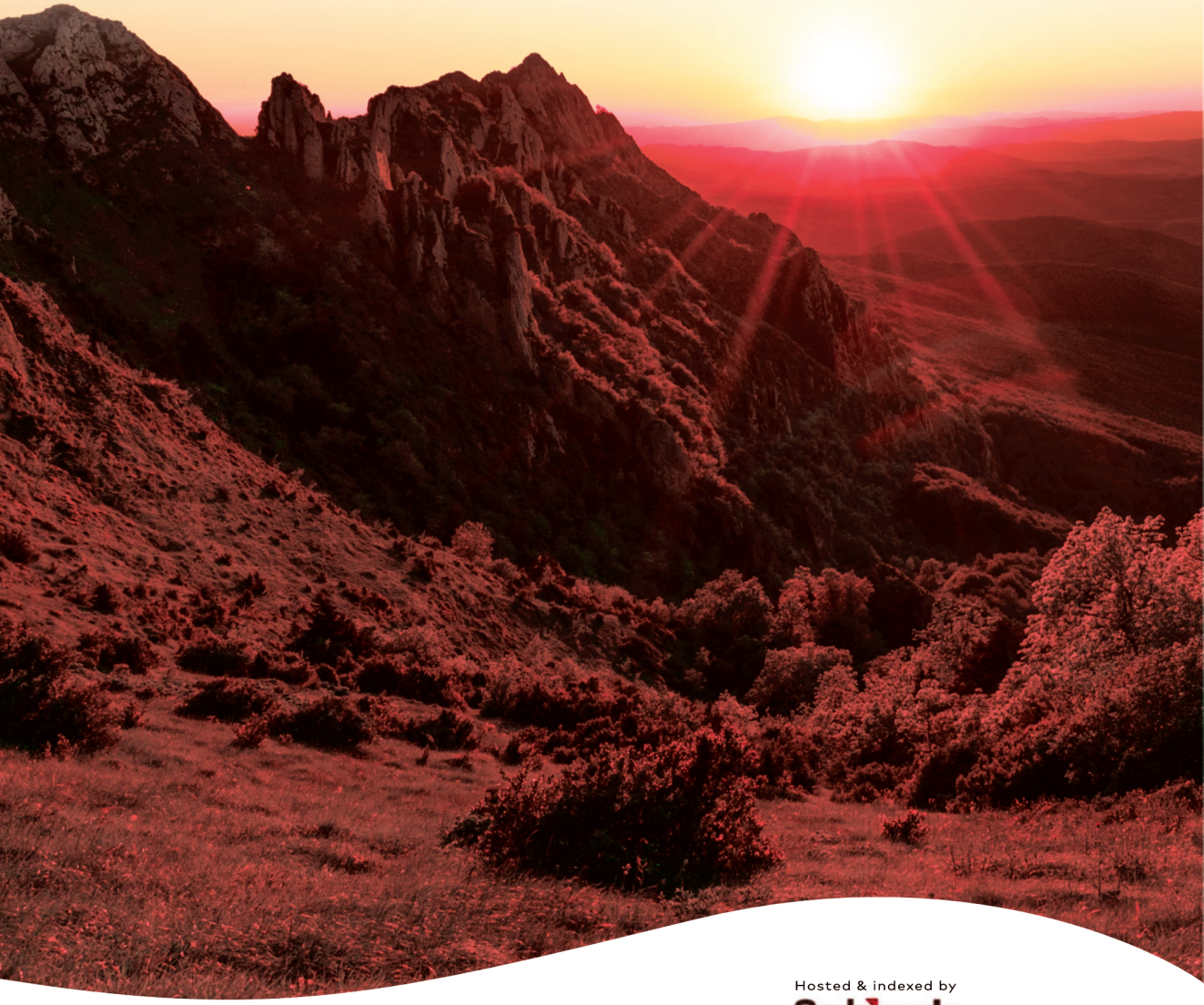
The Dyke

Volume 18 No.1



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The Dyke
www.thedyke.msu.ac.zw
https://journals.co.za/loi/dyke

ISSN 1815-9036 (Print)
ISSN 2790-0940 (Online)

The texts they read matter: Examining new curriculum textual and lexical features of Grades 3 and 4 narrative and information textbooks used in Zimbabwean primary schools.

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Abstract

Reading for comprehension is foundational to successful teaching and learning, particularly at the primary school level. Central to this process is the availability of appropriately levelled textbooks that support cognitive development. This study investigates the textual and lexical characteristics of Grades 3 and 4 narrative and informational textbooks currently used in Zimbabwean primary schools, with the aim of determining their readability and vocabulary demands. Employing the Flesch Reading Ease metric and the LexTutor Vocabulary Profiler, the analysis reveals that while the structural and lexical patterns of the sampled texts broadly conform to conventional school textbook design, significant misalignments with grade-level expectations persist. Informational texts were found to be disproportionately difficult for the intended learners, whereas narrative texts were substantially below the cognitive demands expected at those grade levels. Both scenarios raise critical pedagogical concerns: overly complex texts may engender learner frustration, while excessively simplified texts risk undermining academic engagement and intellectual growth. These findings underscore the urgent need for evidence-based criteria in the selection and approval of school textbooks. Recommendations are proposed for education policymakers and curriculum developers to ensure alignment between textbook content, learner cognitive capacity, and curricular goals.

Keywords: reading comprehension, textbook evaluation, vocabulary profiling, readability, primary education, Zimbabwe

The Dyke
www.thedyke.msu.ac.zw

18(1):276-309
ISSN 1815-9036 (Print)
ISSN 2790-0940 (Online)

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Introduction

Reading for comprehension constitutes a foundational skill in the academic development of learners. It enables the acquisition and integration of knowledge across the curriculum and is therefore essential for meaningful learning. Yet, it remains a skill with which many learners struggle, both in first language (L1) and second language (L2) contexts. In L2 environments, the challenge is particularly acute, as learners must simultaneously acquire language proficiency and decode text for meaning (Grabe & Stoller, 2011). This dual cognitive load often hinders the development of fluent and strategic reading practices, particularly in early educational stages.

Scholars have attributed difficulties in reading comprehension to a complex interplay of learner-related, text-related, and author-related factors (Kasule, 2011). Among these, the characteristics of the texts themselves, such as lexical density, syntactic complexity, and semantic accessibility, are known to significantly influence learner engagement and comprehension (Nation, 2013; Alderson, 2000). The current study focuses specifically on the textual and lexical dimensions of reading, exploring the readability and vocabulary load of selected narrative and informational text extracts drawn from Grade 3 and Grade 4 textbooks used in Zimbabwean primary schools.

The selection of Grades 3 and 4 is intentional and theoretically grounded. This period is widely recognised as a pivotal stage in reading development, marking the transition from 'learning to read' to 'reading to learn' (Chall, 1983; Gibbons, 2009; Sibanda, 2017). This way, learners are expected to have mastered fundamental decoding and fluency skills, which are prerequisites for higher-order comprehension and knowledge construction. In Zimbabwean primary schools, textbooks serve as primary conduits for curriculum delivery, making their linguistic accessibility critical to equitable and effective learning.

Given this context, the study interrogates the readability levels and vocabulary profiles of the selected texts using established quantitative tools, namely, the Flesch Reading Ease formula and the LexTutor vocabulary profiler. Through this analytical lens, the research aims to determine whether the lexical and syntactic features of the texts align with the cognitive and linguistic profiles expected at Grades 3 and 4. By doing so, the study contributes to broader conversations around text selection, textbook design, and reading equity in multilingual and resource-constrained educational settings.

Literature Review

School textbooks constitute the primary medium through which curricular content is delivered in most educational systems. Textbooks often function as de facto syllabi, guiding both teachers' instructional planning and learners' engagement with learning tasks (Larsson, 2017). For learning to be effective, learners must be able to extract meaning from textbooks. As such, the readability of these texts is critical. Elements such as composition, organisation, content, vocabulary, discourse style, and genre shape a text's readability and interact with the learner's prior knowledge to influence comprehension.

In Zimbabwe, the Ministry of Primary and Secondary Education (MoPSE) centrally prescribes textbooks for use across all government primary schools. This standardised approach, while common in many African contexts (Attakumah, 2020; Sibanda & Herman, 2024; Zimbabwe MoPSE, 2015), may generate challenges given the diversity of learner backgrounds and abilities. Significantly, these prescribed textbooks are written in English, the former colonial language, yet are used predominantly by learners for whom English is a second language (L2). These learners face the dual challenge of acquiring content knowledge while simultaneously developing language proficiency.

This study examines both narrative and informational texts drawn from prescribed textbooks. Following Halliday and Hasan's (1976) seminal definition, Shen (2012, p. 2667) describes a text as "any passage, spoken or written, of whatever length, that forms a unified whole." In the present study, the term "text" refers specifically to narrative and informational passages extracted from Grade 3 and 4 textbooks.

Narrative texts relate to a sequence of events and may encompass both fictional and non-fictional content (Falihah, Rahmawati, & Baihaqi, 2022; Sallabas, 2013). These texts tend to follow a linear, story-like structure, which enhances readability and engagement. The narrative samples analysed in this study were extracted from Grades 3 and 4 English language textbooks. Informational texts, by contrast, are typically characterised by nominalisation, passive constructions, and academic vocabulary (Gibbons, 2009). They often include specialised or technical language, visual representations such as graphs or diagrams, and interpretive content (Li, Beecher, & Cho, 2018; Tortorelli, 2019), all of which can impede accessibility, particularly for L2 learners. In this study, informational texts were drawn from textbooks in content subjects including Agriculture, Science and Technology, and Social Studies.

Following the introduction of a competence-based curriculum in Zimbabwe in 2015 (MoPSE, 2015), new textbooks were developed and introduced nationwide. This study, therefore, employs readability indices and vocabulary profiling tools to assess the textual and lexical features of the narrative and informational texts included in these materials at Grades 3 and 4. Given the relative paucity of research on reading literacy in Zimbabwe, this study aims to contribute to scholarly discourse and inform policymakers on key considerations for textbook selection.

Text Readability

Comprehension is a key outcome of reading, and this depends in part on the readability of the text. Readability refers to the linguistic features of a text that affect how easily a reader can decode and understand it (Wissing, Van den Berg, & Blignaut, 2016). Among the most significant predictors of textual difficulty are semantic content (e.g., vocabulary) and syntactic complexity (e.g., sentence length) (DuBay, 2004).

Word difficulty and familiarity are often used as indicators of text complexity. Zamanian and Heydari (2012) argued that word length, particularly the number of syllables, influences reading difficulty, with polysyllabic words generally posing greater challenges. However, this is not always the case. Some short words may be highly technical and unfamiliar, while longer words may be more easily recognised due to frequent usage.

Sentence length and syntactic complexity also influence readability (Sibanda, 2017). Long, complex sentences are generally more difficult to comprehend, though overly short or fragmented sentences may also hinder coherence. Visual supports and contextual cues can mediate the difficulty of longer constructions. Moreover, a degree of lexical and syntactic complexity is desirable, as it supports cognitive development and vocabulary growth (Sibanda, 2014).

To evaluate readability, various computational tools are available, including the Flesch Reading Ease (FRE) index and the Dale-Chall Formula. While these indices are not without limitations, they are widely used due to their simplicity and objectivity (Heydari, 2012). In this study, the FRE index was employed alongside LexTutor's vocabulary profiler to provide a more nuanced analysis of the sampled texts.

Vocabulary

Vocabulary is a key textual feature and plays a critical role in reading comprehension. Pikulski and Templeton (2004) define vocabulary as the total set of words known, understood, and actively used by an individual. Vocabulary knowledge extends beyond mere word definitions to encompass knowledge of word forms, functions, and usage (Pretorius & Stoffelsma, 2017). Mastery of vocabulary is essential for learners to access curriculum content, articulate ideas, and acquire new concepts (Gusti, 2015).

In L2 contexts, vocabulary acquisition is often limited to what is encountered in school-based materials, primarily textbooks (Sun & Dang, 2020). However, textbooks are often in short supply and may not always align with learners' cognitive or linguistic levels (Bukaliya & Mubika, 2012). Thus, the quality and appropriateness of vocabulary in textbooks are of paramount importance.

L2 Vocabulary Development

Vocabulary development occurs through both implicit (incidental) exposure and explicit instruction (Pretorius & Stoffelsma, 2017; Logan, 2012). Implicit learning takes place when learners encounter new words through oral interactions, story reading, or media engagement. However, L2 learners in resource-constrained contexts often lack access to linguistically rich environments, placing greater reliance on school textbooks.

Explicit vocabulary instruction involves deliberate teaching of target words. Logan (2012) contends that explicit vocabulary teaching can help narrow the achievement gap. Nation (1990) found that after five years of English instruction, L2 learners typically acquire only 1,000–2,000-word families, insufficient for independent text comprehension. Unfortunately, there is limited empirical data on vocabulary uptake among L2 learners in African contexts. Given that textbooks are central to both instruction and vocabulary acquisition, this study focuses on the vocabulary content of Zimbabwe's prescribed Grade 3 and 4 textbooks.

Vocabulary frequency levels and lexical thresholds

Vocabulary frequency levels classify word families according to their occurrence in natural language use, drawing from well-established corpora such as the British National Corpus (BNC) and the Corpus of Contemporary

American English (COCA). These classifications are essential for understanding the lexical demands of texts, particularly in educational settings.

Lexical thresholds refer to the minimum number of word families a reader must know to comprehend a text adequately (Laufer & Ravenhorst-Kalovski, 2010). Nation (2012) proposes a tripartite categorisation of vocabulary based on frequency:

- High-frequency words: These comprise the most common 3,000-word families and typically account for approximately 80% of the lexical content in most written texts. They are foundational for everyday communication and early literacy development (Nation & Anthony, 2013).
- Mid-frequency words: Encompassing word families from the 4,000 to 9,000 range, this category includes general academic vocabulary essential for engaging with expository and subject-specific texts. Notably, Coxhead's (2000) Academic Word List identifies 570 core academic word families that occur across disciplines, contributing an estimated 10–11% of lexical coverage in academic texts.
- Low-frequency words: These exceed the 9,000-word family threshold and tend to include technical or specialised vocabulary. While they account for only around 5% of academic text coverage, when their presence surpasses this threshold, they significantly hinder comprehension (Schmitt & Schmitt, 2012; Dodigovic, 2005).

A key insight from empirical research is that learners must understand approximately 98% of the words in a text to achieve independent and meaningful comprehension (Nation, 2006; Schmitt, Jiang, & Grabe, 2011). This emphasises the pedagogical imperative to analyse the lexical profiles of school textbooks, ensuring alignment with learners' proficiency levels, and supporting vocabulary acquisition through grade-appropriate content. Hence, the main question this study attempts to answer is how do Grades 3 and 4 narratives and informational textbooks used in Zimbabwean primary schools differ in terms of their textual and lexical features? In other words what are the key textual characteristics of the narrative and informational texts prescribed at Grades 3 and 4? And what are the vocabulary frequency profiles of these narrative and informational texts?

Methodology

To investigate the textual and lexical profiles of primary school textbooks, I purposively selected textbooks in Agriculture, Science and Technology, and Social Studies subjects prescribed for Grades 3 and 4. These were obtained from practising teachers at one participating school. From each textbook, I sampled three extracts, drawn respectively from the beginning, middle, and end, to ensure a representative distribution of content across the text. This yielded a total of nine informational text extracts (three per subject). In addition, six narrative text extracts, three from each grade level, were selected from the officially prescribed English readers.

For the readability analysis, each extract was uploaded individually into the Flesch Reading Ease (FRE) tool embedded in Microsoft Word. The FRE index quantifies text readability on a scale from 0 to 100, where lower scores indicate greater difficulty. As Kasule (2011) explains, texts scoring closer to zero are significantly more complex, typically requiring advanced reading skills. The aim of this analysis was to determine whether the sampled texts aligned with the expected readability levels for learners in Grades 3 and 4.

In parallel, a lexical profile analysis was conducted using the LexTutor Vocabulary Profiler, accessible at http://lexitutor.ca/vp/eng/. This web-based tool categorises words into frequency bands based on the British National Corpus (BNC) and the Corpus of Contemporary American English (COCA). The BNC-COCA profiler divides the lexicon into 25 frequency levels, with K1 to K3 representing the 3,000 most commonly used word families across spoken and written English (Nation, 2006). These are considered foundational for general comprehension. Although the BNC-COCA profiler offers detailed insights into word frequency, it does not isolate academic vocabulary. To address this, the Classic Vocabulary Profiler was also employed to identify terms from the Academic Word List (AWL) (Coxhead, 2000). The combined use of these tools allowed for a comparative analysis of vocabulary demands across grade levels, highlighting potential developmental shifts.

The decision to use both FRE and LexTutor was a deliberate attempt to triangulate findings and mitigate the limitations inherent in each tool. FRE focuses on surface-level features such as word and sentence length, without accounting for semantic complexity, reader familiarity, or cultural-linguistic factors (Crossley, Skalicky, Dascalu, McNamara, & Kyle, 2017; Oakland & Lane, 2009). While sentence and word length are proxies for difficulty, they cannot fully account for the cognitive and linguistic demands placed on readers. Conversely, although LexTutor provides a more nuanced vocabulary breakdown, it occasionally misclassifies words or fails to recognise unfamiliar or indigenous lexical items. This was particularly evident in the narrative texts, where local terms embedded in cultural contexts were excluded from analysis, potentially underrepresenting their impact on comprehension.

Despite these limitations, the two tools, used in tandem, offer a complementary analytical lens. FRE quantifies surface textual difficulty, while LexTutor reveals the distribution of vocabulary across frequency bands, thus providing deeper insights into text accessibility, especially in L2 contexts where vocabulary coverage is a critical determinant of reading comprehension.

Results

Grade 3 and 4 text extracts

Table 1 below shows the readability analysis for the two grades according to the four subjects referred to earlier, with three topics per subject from both grades.

Table 1: Text profiles of the Grade 3 and 4 texts

	Total no. of words	Mean sentences per paragraph	Mean words per sentence	Mean length of words	Passives %	Flesch reading ease %	Flesch Kinkaid grade level
Grade 3 Agriculture	836						
Types of farm implements and machinery	306	20.0	15.3	5.2	40	49.7	10.1
Plants within the local environment	254	24.0	10.5	4.7	20	82.1	4.4
Apiculture	276	22.0	12.5	4.3	18	78.2	5.4
Averages across the Agriculture extracts		22.0	12.8	4.7			
Grade 3 Science and Technology	982						
Sources of electricity	311	26.0	11.9	5.0	23	48.6	9.4
Natural and manmade sources of water	384	28.0	13.7	4.4	35	74.6	6.2
Weather and climate hazards	287	22.0	13.0	4.3	13	75	6.0

	Total no. of words	Mean sentences per paragraph	Mean words per sentence	Mean length of words	Passives %	Flesch reading ease %	Flesch Kinkaid grade level
Averages across Science extracts		25.3	12.9	4.6			
Grade 3 Social Studies	931						
Family ceremonies and rituals	355	19.0	12.6	4.4	28	67.6	6.9
Government as a social service provider	318	26.0	12.2	4.8	19	56.2	8.0
Relationship between population and transport	258	24.0	10.7	5.3	4	56.2	8.0
Averages for Social Studies extracts		23.0	11.6	4.8			
Grade 4 Agriculture	**658**						
Causes of erosion	260	22.0	11.8	4.3	31	76.7	5.4
Different agricultural seasons	234	13.0	18.0	5.0	38	52.9	10.3
Small livestock production	164	16.0	10.0	4.5	25	78.8	4.8
Averages across Agriculture texts		17.0	12.3	4.6			
Grade 4 Science and Technology	1658						
Water borne diseases	404	24.0	16.8	4.9	29	50.2	10.4
Teeth and their functions	847	63.0	13.4	4.2	25	83.5	4.9
Elements, mixtures and compounds	372	21.0	17.7	4.6	47	54.4	10.0

	Total no. of words	Mean sentences per paragraph	Mean words per sentence	Mean length of words	Passives %	Flesch reading ease %	Flesch Kinkaid grade level
Averages across Science extracts		36.0	16.0	4.6			
Grade 4 Social Studies	1104						
Families							
Conservation	251	19.0	13.2	4.6	10	63.9	7.6
of natural resources	552	22.0	28.0	4.7	36	50.6	12.4
Work and leisure	301	20.0	15.0	4.7	5	62.5	8.2
Averages across Social Studies extracts		20.3	18.7	4.7			
Grade 3 English narrative texts							
Collecting eggs	208	26	8.0	3.9	0	99.0	1.4
How the elephant became a king	268	35	7.6	4.0	0	91.1	2.4
The snake which guards the pools	218	26	8.3	4.0	0	91.2	2.6
Averages across Grade 3 narrative texts		10.4	9.6	3.9			

	Total no. of words	Mean sentences per paragraph	Mean words per sentence	Mean length of words	Passives %	Flesch reading ease %	Flesch Kinkaid grade level
Grade 4 English narrative texts							
The donkey and his friends	232	27	8.5	3.8	0	94.9	2.1
Grandmother Chibasa	288	25	11.5	3.9	4	93.5	3.0
The bushfire	141	11	12.8	4.1	9	90.0	3.8
Averages across Grade 4 narrative texts		8.0	11.6	3.9			

The readability statistics for content subjects show that the Grades 3 and 4 texts were generally beyond the intended grade levels as indicated by the Flesch-Kinkaid grade levels, which ranged from 4.4 to 12.4; not a single Grade 3 information text was at Grade 3 level which suggests that the information texts were difficult. Only two Grade 4 information texts were at Grade 4 level. On the other hand, the narrative texts for both grades were below grade level, ranging from grade 1.4 to 3.8. This indicates that the narrative texts were easier to understand compared to information extracts, a feature which is not uncommon between information and narrative texts.

The occurrence of passives differed somewhat across the texts. Some information texts which had longer sentences and a higher percentage of passives were more difficult (e.g. texts titled: *Farm implements* and *Natural and manmade sources of water*) while others with passives were not as difficult (e.g. the text titled *Plants within the environment*). No passives occurred in the Grade 3 narrative texts and only two Grade 4 texts (*Grandmother Chibasa* and *The bushfire*) had passives whose occurrence was very low (4% and 9% respectively). Interestingly the two Grade 4 narrative texts with passives were the ones that were deemed to be at Grade 3 level among the narrative texts though they were below the intended

grade levels. Thus, the use of passives per se may not necessarily make a text more difficult.

The Agriculture text on *Farm implements* has the longest sentences in that subject (15.3 mean words); deals with less commonly known concepts, contains passive and makes use of nominalisations with adjectives or qualifiers – *dipping solution, feeding containers, irrigation equipment* and *indigenous plants*. There is a lot of specialised terminology like *knapsack sprayer, vaccines, sprinkler pipes, planter.* In contrast, the other text on *Plants within the local environment* has very short sentences dealing with more common objects (*trees, shrubs, grasses*) and less specialised terminology which suggests that topics might determine text difficulty. Also, author style could have played a part in influencing text difficulty since the textbooks were written by different authors.

The Grades 3 Science texts displayed a different pattern; the text on *Sources of electricity* which had the highest-grade level (9.4) among the Grade 3 Science texts, had a mean sentence length of 11.9, 23% passives and a mean word length of 5.0. This is typically associated with more academic type texts, with a lot of specialised terminology like *hydropower, thermal power* and *device.* In contrast, the Grade 3 text (*Natural and man-made sources of water)* contains more common terms *water, rivers, dams, boreholes, taps,* but its mean sentence length is longer (13.7 words per sentence) and it contains more passives (35%). Although both texts were beyond Grade 3 level, the *Sources of electricity* text, despite having slightly shorter sentences and fewer passives, had a much lower RE index (Grade 9) than the text on *Natural and man-made sources of water* (Grade 6), despite longer mean sentence length and percentage of passives (35%).

So, it is difficult to conclude that longer words and sentences as well as greater use of passives will necessarily result in a more difficult text because there is no one-to-one consistency. Following the earlier observation, familiarity of topics could have influenced text difficulty. Also, possibly the availability of everyday words to talk about topics at a fairly general level, and the need for more specialised terminology to talk about topics at a more scientific level. *Sources of water* is a familiar concept while information on *Sources of power* is less familiar and entails a lot of scientific detail which might make a text more complicated.

Although the trend is almost the same across grades and subjects, it is a combination of factors such as sentence and word length, familiarity of topic, passives, technical vocabulary, nominalisation and author style, which generally make a text more challenging, as can be seen in the examples given above.

Another feature is that the degree of abstraction was higher in texts with higher grade ratings making the texts more challenging narrative texts. Learners might find it difficult to understand some of the more abstract vocabulary for example *traffic, commuters, density* or *hydro* though they might be acquainted with everyday terms like *car, truck, roads, number or water*. This shows the difference between academic language in textbooks and conversational language.

Also, Grade 3 texts which had a higher grade level of 4 and 5 had topics which seemed familiar and less scientific for example *Plants in the local environment, Apiculture, Causes of soil erosion, Small livestock production.* These grade levels (4/5) are slightly closer to Grade 3. The Grade 4 text titled *Small livestock production's text* structure is characterised by shortish sentences with simple and familiar vocabulary. Even though it is an information text the style of writing and the sentence structure is simple. The author makes a statement and goes on to give examples which is a typical feature of a descriptive paragraph in information texts.

This makes it easy for learners to understand texts at that particular level which is different from the second text titled *Conservation of natural resources.* This is a typical academic text which has long sentences (28 words per sentence) which are characterised by specialised vocabulary (*recycling, gully, deforestation, reclaiming*). It also has nominal constructions (*land reclamation, deforestation*). There are passives (*This is done after land has been damaged, either by floods, deforestation*...). This text contains more sophisticated use of language, longer sentences as well as embedded and subordinate clauses, features associated with academic language. Though the text is meant for Grade 4 learners it has clearly not been adapted for the intended learners.

The narrative texts are different from the information texts; they made use of words that signal setting and characters and use a lot of familiar vocabulary. Here are two examples from Grade 3 and 4 texts respectively (*Collecting eggs* and *The old donkey and his friends*).

> ***One fine morning, Sipiwe and Mother went to collect eggs from the hens.***
> ***Once there was a man who owned a donkey.***

From the above examples, the syntax is simple, the story line deals with the everyday/familiar and is sequential and the vocabulary is simple and familiar which makes narrative texts easier to comprehend than information texts.

For the readability analysis, I uploaded the separate excerpts onto the Flesch Reading Ease platform on Microsoft Word. The Flesch Reading Ease uses an index whereby the closer a score is to zero the more difficult a text is (Kasule 2011). Text readability depends on the length of sentences as well as the complexity of language used in a particular text (Yulianto, 2019). The underlying assumption, as Yulianto (2019:87) asserts, is that "the longer the words and sentences the harder the passage to read." The analysis was meant to establish the readability levels of the texts in question as well as to find out whether the texts in question resembled grade level texts they were meant to represent.

Table 2 below shows the text statistics for the different genres across the two grades. The statistics were acquired after uploading each text on to the Flesch Reading Ease platform on Microsoft Word which then automatically processed the texts resulting in the means being reported below.

Table 2: Means across paragraphs, sentences and words

Text extracts	Mean sentences per paragraph	Mean words per sentences	Mean length of words
Grade 3			
Agriculture extracts	22.0	12.8	4.7
Science extracts	25.3	12.9	4.6
Social Studies extracts	23.0	11.6	4.8
Narratives	10.4	9.6	3.9
Grade 4			
Agriculture extracts	17.0	12.3	4.6
Science extracts	36.0	16.0	4.6
Social Studies extracts	20.3	18.7	4.7
Narratives	8.0	11.6	3.9

The comparative analysis of mean readability scores (as presented in Table 2) reveals that Science texts featured the longest paragraphs and sentences across the three content areas, although average word length remained relatively consistent. This indicates that syntactic complexity, rather than lexical density, contributed more significantly to the increased difficulty of Science texts. Notably, the readability scores placed these texts several grade levels above

their intended audience in both Grades 3 and 4. This discrepancy suggests a failure on the part of textbook developers to adequately calibrate linguistic features, such as sentence length, syntactic structure, and text organisation, to the cognitive and linguistic abilities of the target learners.

In contrast, the narrative texts consistently displayed the shortest paragraphs, simplest sentence constructions, and lowest average word lengths. These characteristics, combined with familiar vocabulary and linear narrative structures, render narrative texts substantially more accessible than their informational counterparts, an expected pattern widely reported in the literature (Wissing et al., 2016; Pretorius & Stoffelsma, 2017).

Vocabulary Profile Results

Table 3 presents the lexical frequency profiles of the sampled texts, disaggregated by genre and grade level. The analysis includes the proportion of words falling within the most frequent 1,000-to-3,000-word families (K1–K3), the Academic Word List (AWL), and beyond. Vocabulary frequency was calculated using the Lextutor online tool, applying the BNC/COCA corpus as the reference framework.

Research indicates that for effective text comprehension, learners must be familiar with at least 95% of the words in a given passage, while optimal, unassisted comprehension requires coverage of approximately 98% (Schmitt, Jiang, & Grabe, 2011; Laufer & Ravenhorst-Kalovski, 2010). Texts falling below the 95% threshold are likely to pose significant comprehension barriers, especially for second language (L2) learners, such as those in the Zimbabwean context.

The results from the vocabulary profile confirm a concerning trend: several information texts failed to meet the 95% benchmark, particularly in Science and Technology, where the presence of low-frequency and specialised vocabulary was pronounced. These findings reinforce the earlier readability analysis, further substantiating claims that these materials are misaligned with the linguistic capabilities of the target learners. Conversely, narrative texts demonstrated significantly higher proportions of high-frequency vocabulary (K1–K2), with negligible representation from the AWL and lower-frequency bands, thus positioning them as pedagogically appropriate for the grades in question.

These findings collectively highlight the pressing need for a more rigorous, learner-centred approach in the development of curricular materials. Textbooks

must be calibrated not only for content accuracy but also for linguistic accessibility, particularly in contexts where English serves as a medium of instruction for L2 learners. Without such alignment, textbooks risk becoming instruments of exclusion rather than facilitators of equitable learning.

Table 3: Vocabulary profiles for Grades 3 and 4 texts

	Agriculture			**Science**			**Social Studies**			**Narrative**		
Grade 3	1	2	3	1	2	3	1	2	3	1	2	3
K1	73.1	75.6	69.6	69.6	84.7	83.3	78.9	76.0	82.6	93.4	89.9	88.2
K2	12.8	9.1	18.8	20.3	6.7	8.5	7.6	5.8	8.1	1.9	8.3	5.9
K3	5.4	4.7	1.8	5.1	3.7	2.4	5.4	14.3	2.8			
K4	2.2	3.1	0.7	1.3	2.0	1.4	2.3	1.6	2.5	0.5	0.9	
K5	4.2	3.9	0.4	2.5	0.2	1.4	1.1			2.8		
K6			0.7		0.2				0.3			1.1
K7		0.8	3.3					0.4	0.3			
K8	0.3	0.8	0.4			0.3			0.6			
K9	0.6	0.8	1.8						0.3			
K10						1.7			0.3			
K11				0.3				1.2			0.9	
K12	0.3		0.7									
K13		0.8										
K14					0.2							
K17				0.3								
K18												
K19												2.2
AWL		1.2	0.7	5.7	3.1	2.8		9.7	3.5			0.4
Grade 4	1	2	3	1	2	3	1	2	3	1	2	3
K1	74.0	68.1	74.1	74.0	82.6	71.9	85.3	83.5	79.3	93.2	93.1	81.6
K2	13.7	13.0	11.2	7.4	5.8	12.0	5.6	8.6	9.9	2.5	4.5	8.5
K3	2.3	8.4	2.4	5.6	2.0	9.9	6.0	1.5	4.9			2.1
K4	3.1	2.1	0.6	3.9	2.7	0.8	1.6	1.5	1.8	0.4	2.1	2.1
K5	5.3	2.5	1.2	2.5	1.2	2.7			2.0	0.8		2.1
K6		0.8	1.8	1.2		0.5	0.8	0.9	0.2	2.5	0.7	0.7
K7	0.4	2.1	2.4	0.2	0.7		0.4	0.6	0.5			0.7
K8	0.4	0.8	2.4	1.5	0.5				0.4		0.7	0.7
K9		0.4			1.2	1.1						

	Agriculture			Science			Social Studies			Narrative		
K10			0.6	0.2	0.1							
K11	0.4				0.1							
K12				1.5	0.1						0.3	
K13					0.1	0.5						
K20		0.4										
K21				0.5								
K22				0.2								
AWL	5.4	0.9	2.4	3.5	0.9	1.3	4.8	5.0	3.1			

	Agriculture			*Science*			*Social Studies*			*Narrative*		
Grade3	*1*	*2*	*3*	*1*	*2*	*3*	*1*	*2*	*3*	*1*	*2*	*3*
K1	*73.1*	*75.6*	*69.6*	*69.6*	*84.7*	*83.3*	*78.9*	*76.0*	*82.6*	*93.4*	*89.9*	*88.2*
K2	*12.8*	*9.1*	*18.8*	*20.3*	*6.7*	*8.5*	*7.6*	*5.8*	*8.1*	*1.9*	*8.3*	*5.9*
K3	*5.4*	*4.7*	*1.8*	*5.1*	*3.7*	*2.4*	*5.4*	*14.3*	*2.8*			
K4	*2.2*	*3.1*	*0.7*	*1.3*	*2.0*	*1.4*	*2.3*	*1.6*	*2.5*	*0.5*	*0.9*	
K5	*4.2*	*3.9*	*0.4*	*2.5*	*0.2*	*1.4*	*1.1*			*2.8*		
K6			*0.7*		*0.2*				*0.3*			*1.1*
K7		*0.8*	*3.3*					*0.4*	*0.3*			
K8	*0.3*	*0.8*	*0.4*			*0.3*			*0.6*			
K9	*0.6*	*0.8*	*1.8*						*0.3*			
K10						*1.7*			*0.3*			
K11				*0.3*				*1.2*			*0.9*	
K12	*0.3*		*0.7*									
K13		*0.8*										
K14					*0.2*							
K17				*0.3*								
K18												
K19												*2.2*
AWL		*1.2*	*0.7*	*5.7*	*3.1*	*2.8*		*9.7*	*3.5*			*0.4*
Grade 4	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
K1	*74.0*	*68.1*	*74.1*	*74.0*	*82.6*	*71.9*	*85.3*	*83.5*	*79.3*	*93.2*	*93.1*	*81.6*
K2	*13.7*	*13.0*	*11.2*	*7.4*	*5.8*	*12.0*	*5.6*	*8.6*	*9.9*	*2.5*	*4.5*	*8.5*
K3	*2.3*	*8.4*	*2.4*	*5.6*	*2.0*	*9.9*	*6.0*	*1.5*	*4.9*			*2.1*

K4	3.1	2.1	0.6	3.9	2.7	0.8	1.6	1.5	1.8	0.4	2.1	2.1
K5	5.3	2.5	1.2	2.5	1.2	2.7			2.0	0.8		2.1
K6		0.8	1.8	1.2		0.5	0.8	0.9	0.2	2.5	0.7	0.7
K7	0.4	2.1	2.4	0.2	0.7		0.4	0.6	0.5			0.7
K8	0.4	0.8	2.4	1.5	0.5				0.4		0.7	0.7
K9		0.4			1.2	1.1						
K10			0.6	0.2	0.1							
K11	0.4				0.1							
K12				1.5	0.1						0.3	
K13					0.1	0.5						
K20		0.4										
K21				0.5								
K22				0.2								
AWL	5.4	0.9	2.4	3.5	0.9	1.3	4.8	5.0	3.1			

As anticipated, the majority of words across all texts, irrespective of grade or genre, were drawn from the high-frequency K1 band, ranging from 70.7% to 93.4%. This finding aligns with established corpus-based studies, which suggest that general texts are typically dominated by high-frequency vocabulary, facilitating comprehension and aiding reading fluency (Astika, 2016; Nation, 2006). Notably, no academic words were identified in the narrative texts, whereas they were present to varying degrees in the informational texts.

For most narrative texts, six in Grade 3 and seven in Grade 4, the 95% lexical coverage threshold was attained exclusively within the high-frequency (K1–K3) bands. Mid-frequency vocabulary only featured when calculating the 98% optimal coverage. In contrast, informational texts required both high- and mid-frequency vocabulary to reach the 95% benchmark. This suggests that narrative texts imposed a lighter lexical burden, rendering them more accessible for young readers. The gradual inclusion of mid-frequency vocabulary in informational texts, particularly in Grade 4, may indicate an appropriate lexical progression as learners advance, consistent with curricular expectations for increasing cognitive challenge.

Interestingly, among the narrative texts, the Grade 4 story *The Bush Fire* required inclusion of mid-frequency words, such as *blazing*, *gobbling*, *mopped*, and *wearily*, to attain the 95% coverage. This text also had the highest Flesch-Kincaid grade level (3.8) among its narrative counterparts, supporting the correlation between increased lexical complexity and grade level.

The high occurrence of familiar, high-frequency words in narrative texts is pedagogically sound at this stage of learners' development, especially given that learners in Grades 3 and 4 are transitioning from "learning to read" to "reading to learn" (Gibbons, 2009; Sibanda, 2017). High-frequency words enhance decoding fluency and facilitate comprehension, providing a foundation for further vocabulary acquisition. The contrast in lexical demands between the two genres illustrates the inherent disparity between narrative and informational texts: while narrative texts rely heavily on accessible, familiar vocabulary and linear story structures, informational texts are often more lexically and syntactically dense, featuring abstract and technical language such as *indigenous*, *electrification*, *deforestation*, and *solvent*.

Among the informational texts, four Grade 3 texts and eight Grade 4 texts achieved the 98% optimal lexical coverage using only high- and mid-frequency words. The remainder required inclusion of low-frequency vocabulary, thereby increasing the overall lexical load. This reinforces the finding that certain informational texts are lexically misaligned with their target audience. For effective comprehension and vocabulary growth, learners require consistent exposure to mid-frequency vocabulary; however, when low-frequency words are introduced prematurely or excessively, cognitive overload may ensue (Schmitt & Schmitt, 2012).

Narrative texts, in contrast, attained 98% coverage with the addition of only a few mid-frequency words. These tended to be concrete and familiar (e.g., *leaf*, *bubbles*, *peanuts*, *beady*), in contrast to the abstract and technical mid-frequency words in informational texts (e.g., *recycling*, *erosion*, *sanitation*). In several cases, the informational texts attempted to explain difficult vocabulary within the text, such as defining *erosion* as "the removal of soil along drainage lines by surface water." However, these explanations often employed further technical language, potentially limiting their pedagogical utility.

Low-frequency words occurred minimally across all texts, ranging from 0% to 1.5%, consistent with their typical representation in academic texts (Nation, 2001). These terms were primarily subject-specific and discipline-bound (e.g., *sucrose*, *fructose*, *cyclone*, *salmonella*, *typhoid*). Notably, the highest density of low-frequency words was observed in the Science text *Water-borne Diseases*, which contained five distinct low-frequency items.

Academic Word List (AWL) vocabulary was also limited across the corpus, ranging from two to 14 tokens per text, contributing between 0.4% and 9.7%

of the total vocabulary. This aligns with Coxhead's (2000) observation that AWL words typically comprise no more than 11% of tokens in academic texts. In line with expectations, narrative texts lacked academic vocabulary, with the exception of one Grade 3 text (*How Elephant Became King*), which featured a single AWL word (*finally*). While the virtual absence of AWL vocabulary is typical for narrative texts at the lower primary level, it is not entirely uncommon (Mirshojae & Shragard, 2015).

Intriguingly, contrary to expectations, the Grade 3 informational texts exhibited higher proportions of AWL vocabulary (ranging from 5.7% to 9.7%) than the Grade 4 texts (ranging from 4.8% to 5.8%). This suggests a misalignment between text complexity and intended grade level and is likely attributable to authorial inconsistency or insufficient sensitivity to developmental appropriateness in textbook design. These findings corroborate the earlier Flesch-Kincaid readability scores, which also indicated that Grade 3 informational texts were well above their designated levels. As Mirshojae and Shragard (2015) contend, high densities of academic vocabulary contribute significantly to textual difficulty. When such vocabulary appears prematurely, it can impede learners' reading confidence and contribute to disengagement, a phenomenon supported by Trowbridge, Bybee, and Powell (2000), who argue that exposure to cognitively overwhelming material fosters reading avoidance and stunts literacy development.

Overall, informational texts demonstrated a significantly broader lexical range than narrative texts, incorporating vocabulary from multiple frequency levels. This was especially evident in the frequent use of technical terminology (e.g., *hydro*, *recycle*, *deforestation*), passive constructions, abstract nouns, and nominalisations, hallmarks of academic language (Gibbons, 2009; Schleppegrell, 2004). These features inherently increase processing demands, posing additional challenges for learners, particularly those operating in English as a Second Language (ESL) contexts where linguistic, cognitive, and resource-related disadvantages are often compounded.

Conversely, the relative simplicity of the narrative texts, both in vocabulary and structure, may reflect a deliberate effort by authors to accommodate early-stage ESL learners. These texts were marked by sequential narration, familiar lexicon, and straightforward syntax. As Masrai (2019) and Nation (2006) argue, early narrative texts and oral language interactions provide fertile ground for the acquisition of high-frequency vocabulary, which forms the foundation for subsequent academic language development. This progression is essential, as

learners cannot be expected to comprehend mid- and low-frequency vocabulary without first having a robust command of the high-frequency lexicon. Academic language development, as Gottlieb and Ernst-Slavit (2014) assert, is additive and cumulative.

The informational texts examined in this study bear the lexical hallmarks of typical academic texts. However, their placement within Grade 3 and 4 curricula appears incongruous, given both their vocabulary profiles and readability statistics. The findings underscore the importance of aligning textual complexity with learners' developmental and linguistic readiness, particularly in multilingual, resource-constrained educational contexts.

Discussion

As anticipated, analysis of the narrative and information text extracts revealed marked genre-based differences. The information texts were demonstrably more complex than their narrative counterparts across both Grades 3 and 4. This was evident in several textual features, including the greater mean length of paragraphs, sentences, and words in information texts, features commonly associated with increased linguistic and cognitive demand. Lexical profiling further indicated that information texts drew from a broader range of word frequency levels, including mid- and low-frequency vocabulary, whereas narrative texts largely relied on high-frequency lexis. These results reflect the divergent communicative purposes and linguistic structures characteristic of each genre.

Misalignment between text level and grade level

The readability assessment exposed a notable misalignment between the complexity of the texts and the intended grade levels. According to the Flesch Reading Ease (FRE) index, where lower scores denote increased difficulty, none of the Grade 3 information texts aligned with their prescribed reading level. FRE scores for Grade 3 texts ranged from 47.5 to 82.1, corresponding to Grade 10.1 and 4.4 respectively. A similar pattern was evident in the Grade 4 texts, of which only two were deemed appropriate for the grade level. The remaining texts ranged from Grade 5.4 (FRE 74.7) to Grade 12.4 (FRE 50.6), suggesting that the majority were pitched several levels above the learners' developmental stage. According to DuBay (2004), FRE scores below 60 classify texts as "fairly difficult," appropriate for Grades 10 to 12, thus raising serious concerns when such texts are prescribed for Grade 3 and 4 learners.

This misalignment is particularly problematic in English-as-a-Second-Language (ESL) contexts, where learners face additional challenges such as limited language proficiency and restricted background knowledge. Presenting such learners with content designed for much older, first-language speakers is likely to result in frustration, reduced motivation, and eventual disengagement from reading (Piper, 2010). In contrast, the narrative texts demonstrated a downward alignment, with readability scores ranging from Grades 2.0 to 3.8, arguably more suitable for early primary ESL learners. However, the wide variation in narrative text difficulty also suggests inconsistencies in writing style and authorial sensitivity to developmental appropriateness.

Educational materials, particularly those used in low-income contexts, should be calibrated to the cognitive and linguistic profiles of the learners. This involves ensuring coherence between grade level and text complexity, incorporating learners' experiential knowledge, and maintaining a logical progression in the development of concepts and literacy skills (Education Bureau, 2018).

Features of academic language

The information texts exhibited numerous features of academic language, including a higher prevalence of passive constructions and the use of nominalisations (e.g., *land reclamation*, *deforestation*), as well as more abstract and technical vocabulary (e.g., *recycling*, *contamination*, *sanitation*). Although only one narrative text (*The Bush Fire*) contained passives, their more frequent use in informational texts reflects the linguistic norms of academic discourse. However, such features are also known to increase text complexity (Snow & Uccelli, 2009; Gottlieb & Ernst-Slavit, 2014).

From Grade 3 onwards, learners are expected to engage with content-area texts that introduce them to academic language. This requirement is particularly critical given that in many African contexts, including Zimbabwe, Grade 4 marks the transition to English as the language of learning and teaching (LoLT) (Sibanda, 2017). The dual challenge of mastering both content and language necessitate considerable scaffolding, including explicit vocabulary instruction and metalinguistic awareness-raising, to facilitate learners' gradual acquisition of academic literacy.

Vocabulary frequency analysis

Vocabulary profiling showed that high-frequency (K1) words predominated in both genres, particularly in narrative texts. All Grade 3 texts achieved the 95%

and 98% lexical coverage thresholds, considered necessary for minimal and optimal comprehension, respectively (Schmitt, Jiang, & Grabe, 2011), with the addition of a few mid-frequency (K4–K5) words. This suggests a progression beyond elementary level vocabulary.

Among the Grade 4 information texts, only two (*Families* and *Work and Leisure*) met the 95% coverage threshold using K1–K3 words; the remaining texts required the inclusion of mid-frequency vocabulary. This indicates a more demanding lexical load, potentially unsuitable for the target audience. The vocabulary used in these texts often includes abstract and technical terms, further complicating comprehension for ESL learners. As Trowbridge, Bybee, and Powell (2000) note, when textbooks are misaligned with learners' proficiency and cognitive levels, they can generate disengagement and reading avoidance, both detrimental to literacy development.

This issue is compounded by the reality that Grade 3 marks the critical transition to reading for learning, yet learners are being exposed to texts that are lexically and conceptually several grades above their level. This is especially problematic in contexts where English is not the learners' home language. Unlike L1 learners who possess a broad foundational vocabulary, ESL learners are required to simultaneously acquire new content and the language through which it is mediated (Pretorius & Spaull, 2015). These dual demands make successful engagement with complex academic texts particularly challenging. While the textbooks analysed in this study reflected some of the characteristics of global academic texts, there was a marked misalignment between grade level and text difficulty. This points to a systemic issue in textbook development—namely, insufficient attention to learner readiness and language acquisition trajectories in ESL contexts.

Pedagogical implications of vocabulary distribution

The inclusion of vocabulary from multiple frequency levels can be pedagogically beneficial, as it exposes learners to lexical variety from the early stages of schooling. Such exposure is essential, given that vocabulary development is both cumulative and incremental (Pretorius & Stoffelsma, 2017). Learners who are introduced early to a wide vocabulary base are better positioned to navigate increasingly complex texts as they progress through school (Hart & Risley, 1995). However, the benefit of such exposure hinges on the pedagogical strategies employed. Teachers must adopt varied instructional approaches to vocabulary

teaching and provide extensive scaffolding, especially in ESL contexts where learners have limited access to English outside the classroom.

Despite their low frequency, words from the Academic Word List (AWL) were present in the information texts, though none of the texts exceeded the 11% ceiling suggested by Coxhead (2000). Though limited in number, these academic words are critical to educational achievement, particularly as learners move toward more content-rich subjects. Masrai (2019) asserts that accumulating mid-frequency vocabulary is essential to academic success. Thus, explicit instruction in this tier of vocabulary should form a key component of language and literacy programmes, especially once learners transition from learning to read to reading to learn.

Implications and Recommendations

Findings from this study reaffirm a longstanding concern in education research: when instructional materials significantly exceed learners' cognitive and linguistic levels, they risk becoming counterproductive. As established by Piper (2010), such texts discourage engagement, impair comprehension, hinder knowledge acquisition, and ultimately demotivate learners, who may resort to avoidance behaviours. In contexts where English is a second language (ESL), these challenges are compounded. The current study revealed that information texts prescribed for Grades 3 and 4 in Zimbabwean primary schools were consistently misaligned with the expected reading levels, as determined by readability and vocabulary analyses. This misalignment presents a serious obstacle to learning for already disadvantaged ESL learners.

Rather than acting as scaffolds for knowledge construction, the information texts reviewed in this study often functioned as barriers to comprehension and academic growth. They failed to reflect the principle of gradual progression from simpler, familiar narrative texts to more abstract, content-heavy informational texts. Consequently, they risk exacerbating educational inequalities by alienating learners who lack the linguistic and cognitive resources to cope with excessive complexity. These findings carry several critical implications for curriculum developers, textbook publishers, educators, and policymakers.

Given that the analysed textbooks were specifically developed to support the implementation of Zimbabwe's new competency-based curriculum, the findings provide timely and constructive feedback for curriculum review processes. As with any newly implemented curriculum, iterative refinement based on empirical evidence is both necessary and expected. The insights presented here

can inform ongoing revisions and quality assurance mechanisms to ensure that instructional materials serve their intended pedagogical purposes.

High-quality textbooks do not emerge from subject-matter expertise alone. Rather, they result from collaboration among a diverse group of stakeholders. It is recommended that textbook development and review teams include subject experts, curriculum designers, linguists, psychologists, teachers, IT specialists, illustrators, and, importantly, learners themselves. Such diversity ensures that the resulting materials are pedagogically sound, linguistically accessible, cognitively appropriate, and visually engaging. Involving end-users in pilot testing stages could help ensure that the final products are not only aligned with national learning outcomes, but also responsive to learners' lived experiences, language proficiencies, and cognitive development stages.

Textbook development should be preceded by rigorous research into the target audience's linguistic, cognitive, and socio-cultural backgrounds. This may include classroom observations, needs analyses, baseline assessments, and learner interviews. Multidisciplinary research teams can gather data on learners' abilities, prior knowledge, and academic exposure. Such empirical grounding would help ensure that materials are calibrated appropriately across grade levels and subject areas, especially in multilingual, resource-constrained contexts. Given the complexity of academic language identified in the information texts, particularly passive constructions, nominalisations, and specialised vocabulary, future textbook editions should include a broader range of instructional scaffolds. These might include:

- Visual aids (e.g., diagrams, infographics, illustrations);
- Interactive elements (e.g., questions for reflection, vocabulary boxes);
- Collaborative learning prompts (e.g., pair and group activities);
- Glossaries for unfamiliar or academic terms;
- Structured summaries or graphic organisers to aid comprehension.

Such additions can help mediate learners' interaction with complex texts, facilitating progressive knowledge building and reducing cognitive overload.

Information should be presented in a logically sequenced and cumulative manner, moving from concrete to abstract concepts and from familiar to unfamiliar vocabulary. Developers should aim to scaffold texts so that each new concept or term builds on previously acquired knowledge. This structured

progression allows learners to incrementally develop academic literacy without being overwhelmed by lexical and syntactic complexity.

Educators also have a critical role in mediating difficult texts. Teaching strategies should be adapted to support learners facing challenges with text comprehension. Recommendations include:

- Systematic vocabulary instruction, distinguishing between high-, mid-, and low-frequency words;
- Collaborative learning, which allows peer-supported meaning-making;
- Pre-reading strategies, such as brainstorming and prediction;
- Supplementary resources, including simplified readers or bilingual glossaries;
- Explicit grammar instruction focused on passive voice, nominalisation, and cohesion devices in academic texts.

Such strategies empower learners to navigate challenging academic discourse and develop confidence in engaging with subject content. Effective mediation of complex instructional texts requires continuous professional development. Teachers should be supported through targeted in-service training that addresses strategies for teaching academic language, differentiating instruction, and integrating literacy support into content-area teaching. Lifelong professional learning is essential in equipping teachers with the tools needed to respond to the evolving demands of curricula and learner profiles, especially in linguistically diverse contexts.

The challenges highlighted in this study are systemic and require a collective response. Curriculum specialists, textbook developers, educators, teacher educators, and policymakers must work collaboratively to ensure that instructional materials are developmentally appropriate, inclusive, and conducive to literacy development. High-quality, grade-appropriate textbooks are not only instructional tools but also equity levers that can either mitigate or amplify disparities in learning outcomes. While the textbooks analysed in this study demonstrate some alignment with global standards for academic texts, their misalignment with grade-level expectations, especially in ESL contexts, presents substantial challenges to effective teaching and learning. The recommendations advanced here underscore the urgent need for a more learner-centred, research-informed, and collaborative approach to textbook development and curriculum implementation.

Conclusion

This study set out to interrogate the textual and lexical characteristics of Grade 3 and 4 narrative and informational textbooks prescribed in Zimbabwean primary schools, with a view to examining their alignment with learners' developmental, linguistic, and cognitive profiles. Through the application of established readability indices and lexical profiling tools, it has become evident that while the texts exhibited genre-congruent features, such as longer, more abstract constructions in informational texts and simpler, more familiar structures in narrative texts, their alignment with prescribed grade levels was largely inconsistent and, in many cases, pedagogically inappropriate.

A critical finding of the study was the pronounced misalignment between text readability and grade level, particularly within the informational texts. These were often pitched several grades above the intended learners, thereby posing significant barriers to reading comprehension, particularly in English-as-a-Second-Language (ESL) contexts. The narrative texts, while more accessible, were in many cases pitched below grade level, reflecting a possible compensatory attempt to cater to learners' limited reading proficiency. This inconsistency across and within genres suggests a lack of coherent developmental progression in curriculum materials and raises serious concerns about the suitability of these texts as pedagogical tools.

The lexical profile analyses reinforced these concerns. Narrative texts overwhelmingly featured high-frequency words, conducive to the development of foundational reading fluency and comprehension. Informational texts, by contrast, drew from a broader range of word frequency bands, including mid- and low-frequency words, academic vocabulary, and specialised terminology, imposing significant lexical demands on learners. While exposure to diverse vocabulary is critical for academic language development, such exposure must be gradual and scaffolded; instead, these texts often presupposed levels of linguistic maturity and content knowledge that learners had not yet acquired. This is particularly problematic in contexts where learners are not only acquiring content knowledge but also the language of instruction itself.

Moreover, features characteristic of academic language, such as nominalisations, passive constructions, abstract terminology, and extended sentence structures, were found to dominate many of the informational texts. These features, while legitimate components of disciplinary discourse, should be introduced progressively and strategically. Their unchecked proliferation in lower-grade

textbooks suggests a disconnect between curriculum intentions and material development practices, and raises critical questions about the role of textbook writers, curriculum developers, and policy oversight in ensuring material appropriateness.

Collectively, these findings emphasise the urgent need for a more learner-centred, developmentally appropriate, and linguistically responsive approach to textbook design and evaluation. In ESL contexts such as Zimbabwe, where learners are navigating dual challenges of language acquisition and content mastery, the provision of grade-level appropriate, cognitively engaging, and linguistically scaffolded texts is not optional, it is essential. The role of the textbook in mediating learning is profound; poorly designed materials not only compromise comprehension and knowledge acquisition, but may also entrench patterns of educational exclusion by alienating learners from textual engagement altogether.

The implications of this study are both immediate and far-reaching. For textbook developers, there is a pressing need to adopt evidence-based practices in the design of school texts, incorporating insights from applied linguistics, psycholinguistics, education, and child development. Multi-disciplinary teams should be involved in textbook production to ensure that materials are pedagogically sound, linguistically accessible, and culturally relevant. For educators, the findings call for greater awareness and professional development in reading instruction and text-levelling strategies, particularly in contexts where learners are expected to make complex linguistic and cognitive transitions with minimal support.

From a policy perspective, this study highlights the need for robust curriculum quality assurance mechanisms, capable of monitoring and evaluating the appropriateness of instructional materials before and after their deployment in classrooms. This includes not only readability assessments but also piloting with real learners, ongoing teacher feedback loops, and periodic textbook reviews as part of a dynamic, responsive curriculum development process.

In conclusion, while the current textbooks reflect certain global patterns in academic discourse and text construction, their deployment within a linguistically and educationally complex context such as Zimbabwe necessitates far greater calibration. Ensuring that school texts function not as barriers but as bridges to knowledge requires deliberate, research-informed interventions at every stage of the textbook development and implementation process. Future

research may explore learners' actual interaction with these texts in classroom settings, investigate teacher mediation strategies, and examine longitudinal outcomes related to literacy development and academic achievement. Only through such holistic inquiry and collaborative practice can we begin to realign educational materials with the learning realities of the children they are meant to serve.

References

Amabeoku, G. J., Kabatende, J., & Chatiza, T. (2001). Antinociceptive and anti-inflammatory effects of Salvia Africana-lutea aqueous leaf extract in mice and rats. *Phytotherapy Research*, *15*(5), 416–421.

Astika, G. I. (2016). Vocabulary learning strategies of secondary school students. *Indonesian Journal of English Language Teaching*, *1*(1), 1–18.

Attakumah, D. (2020). Textbook use and academic achievement of senior high school students in core subjects. *European Journal of Education Studies*, *6*(12), 105–124. https://doi.org/10.5281/zenodo.3669362

Bukaliya, R., & Mubika, A. K. (2012). Assessing the benefits and challenges of the introduction of early childhood development education to the infant grade in the Zimbabwe Education System. *Journal of Educational and Instructional Studies in the World*, *2*(4), 226–235.

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, *34*(2), 213–238.

Crossley, S. A., Skalicky, S., Dascalu, M., McNamara, D. S., & Kyle, K. (2017). Predicting text comprehension, processing and familiarity in adult readers: New approaches to readability formulas. *Discourse Processes*, *54*(5–6), 340–359. https://doi.org/10.1080/0163853X.2017.1296264

Dodigovic, M. (2005). Vocabulary profiling with electronic corpora: A case study in computer assisted needs analysis. *Computer Assisted Language Learning*, *18*(5), 443–455. https://doi.org/10.1080/09588220500442806

DuBay, W. H. (2004). *The principles of readability*. http://www.nald.ca/fulltext/readab/readab.pdf

Falihah, N., Rahmawati, E., & Baihaqi, A. (2022). EFL students' difficulties in writing narrative text. *Journal of English Teaching and Cultural Studies*, *5*(1), 1–14. http://dx.doi.org/10.48181/jelts.v5i1.15026

Gibbons, P. (2009). *English learners, academic literacy, and thinking: Learning in the challenge zone*. Portsmouth: Heinemann.

Gottlieb, M., & Ernst-Slavit, G. (2014). *Academic language: A counter piece for academic success in English language*. Thousand Oaks, CA: Corwin Press.

Gusti, A. (2015). Profiling the vocabulary of news texts as capacity building for language teachers. *Indonesian Journal of Applied Linguistics*, *4*(2), 123–135. https://doi.org/10.17509/ijal.v4i2.689

Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experiences of young American children*. Baltimore: Brookes.

Heydari, P. (2012). The validity of some popular readability formulas. *Mediterranean Journal of Social Sciences*, *3*, 423–435.

Jeon, E. H., & Yamashita, J. (2014). L2 reading comprehension and its correlates: A meta-analysis. *Language Learning*, *64*(1), 160–212. https://doi.org/10.1111/lang.12034

Kasule, D. (2011). Textbook readability and ESL learners. *Reading & Writing - Journal of the Reading Association of South Africa*, *2*(1), 63–76.

Laufer, B. (2010). Lexical threshold revisited: Lexical text coverage, learners' vocabulary size and reading comprehension. *Reading in a Foreign Language*, *22*(1), 15–30.

Li, D., Beecher, C., & Cho, B. Y. (2018). Examining the reading of informational text in 4th grade class and its relation with students' reading performance. *Reading Psychology*, *39*(1), 1–28. https://doi.org/10.1080/02702711.2017.1361493

Logan, L. (2012). Early vocabulary development and reading comprehension (Master's thesis). University of Central Missouri. https://centralspace.ucmo.edu/handle/10768/115

Masrai, A. (2019). Vocabulary and reading composition revisited: Evidence for high-, mid-, and low-frequency vocabulary knowledge. *SAGE Open*, https://doi.org/10.1177/2158244019845182

Nation, I. S. P. (1990). *Teaching and learning vocabulary*. New York: Newbury House.

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139524759

Nation, I. S. P. (2006). How large a vocabulary is needed for reading and listening? *The Canadian Modern Language Review*, *63*(1), 59–82.

Nation, P. (2012). The BNC/COCA word family lists. http://www.victoria.ac.nz/lals/about/staff/paul-nation

Nation, P., & Anthony, L. (2013). Mid-frequency readers. *Journal of Extensive Reading*, *1*, 1–12. https://eprints.lancs.ac.uk

Oakland, T., & Lane, H. B. (2009). Language, reading and readability formulas: Implications for developing and adapting tests. *International Journal of Testing*, *4*(3). https://doi.org/10.1207/s15327574ijt0403_3.

Pikulski, J., & Templeton, S. (2004). *Teaching and developing vocabulary: Key to long-term reading success*. Houghton Mifflin. http://www.eduplace.com

Piper, B. (2010). *Kenya early grade reading assessment findings report*. William & Flora Hewlett Foundation. https://globalreadingnetwork.net/eddata/Kenya-egra-result-2009

Pretorius, E. J., & Spaull, N. (2015). Exploring relationships between oral reading fluency and reading comprehension amongst English second language readers in South Africa. http://www.essa.org.za/fullpaper/essa

Pretorius, E. J., & Stoffelsma, L. (2017). How is their word knowledge growing? Exploring Grade 3 vocabulary in South African township schools. *South African Journal of Childhood Education*, *7*(1). https://doi.org/10.4102/sajce.v7i1.553.

Sallabas, M. E. (2013). Analysis of narrative texts in secondary school textbooks in terms of values. *Educational Research and Reviews*, *8*(8), 361–366. https://doi.org/10.5897/ERR12.190.

Schmitt, N., Jiang, X., & Grabe, W. (2011). The percentage of words known in a text and reading comprehension. *The Modern Language Journal*, *95*(1), 26–43.

Schmitt, N., & Schmitt, D. (2012). A reassessment of frequency and vocabulary size in L2 vocabulary teaching. *Language Teaching*, *47*(4), 1–20. https://www.norbertschmitt.com.uk/

Shen, L. (2012). Context and text. *Theory and Practice in Language Studies*, *2*(12), 2663–2669. https://doi.org/10.4304/tpls.2.12.2663-2669.

Sibanda, J. (2014). Investigating the English vocabulary needs, exposure and knowledge of isiXhosa-speaking learners for transition from learning to read in the foundation phase to reading to learn in the intermediate phase: A case study (PhD thesis). Rhodes University.

Sibanda, J. (2017). Language at the Grade Three and Four interface: The theory-policy-practice nexus. *South African Journal of Education*, *37*(2), 1–9. https://doi.org/10.15700/saje.v37n2a1287.

Sibanda, L., & Herman, T. (2024). Do texts reflect learners' diversity? A case of Grade 4 English and life skills textbooks. *South African Journal of Education*, *44*(2), 1–10.

Snow, C. E., & Uccelli, P. (2009). The challenge of academic language. In D. R. Olson & N. Torrance (Eds.), *The Cambridge handbook of literacy* (pp. 112–133). Cambridge University Press.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences in individual differences in the acquisition of literacy. *Reading Research Quarterly*, *21*, 360–407. https://doi.org/10.1598/RRQ.21.4.1.

Sun, Y., & Dong, T. N. Y. (2020). Vocabulary in high school EFL textbooks: Texts and learner knowledge. *System*, *94*, 102279. https://doi.org/10.1016/j.system.2020.102279

Torterelli, L. S. (2019). Reading rate in informational text: Norms and implications for theory and practice in the primary grades. *Reading Psychology*, *40*(3), 299–316. https://doi.org/10.1207/s15326950dp390273_11

Trowbridge, L. W., Bybee, R. W., & Powell, J. C. (2000). *Teaching secondary school science: Strategies for developing scientific literacy*. Upper Saddle River, NJ: Merrill-Prentice Hall.

Wissing, G., van den Berg, K., & Blignart, S. (2016). Using readability, comprehensibility and lexical coverage to evaluate the sustainability of an introductory accountancy textbook to its readership. *Stellenbosch Papers in Linguistics*, *46*, 153–179.

Wright, T. S., & Cervetti, G. N. (2016). A systematic review of the research on vocabulary instruction that impacts text comprehension. *Reading Research Quarterly*. https://doi.org/10.1002/rrq.163

Yulianto, Y. (2019). An analysis on readability of English reading texts with automated computer tool. *J-SHMIC: Journal of English for Academic*, *6*(1), 81–91.

Zamanian, M., & Heydari, P. (2012). Readability of texts: State of the art. *Theory and Practice in Language Studies*, *2*(1), 43–53. https://doi.org/10.4304/tpls.2.1.43-53