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Readability, Suitability and Exploitability of Reading Texts: Preparatory School English Language Textbooks and EUEE English Exams in Focus

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Abstract

Selecting reading texts is an important move in enhancing engagement, comprehension, motivation, and, by extension, the development of reading skills. Grading reading passages to the level of students based on the readability, suitability and exploitability of the texts has long been regarded as a significant move that provides the overall picture of a text's appropriateness, especially in the context of foreign language teaching and testing. The present study, therefore, aimed to examine the readability, suitability, and exploitability of a sample of reading passages in grades eleven and twelve textbooks and Ethiopian University Entrance Examination (EUEE) English language exams. To achieve this objective, an explanatory sequential mixed-method design was employed, integrating both quantitative and qualitative data on the readability, suitability, and exploitability of selected reading texts. Data were collected from a representative sample of students and EFL teachers in Debre Markos, Dejen, Amanuel, and Bichena schools. The readability of texts has been examined using three readability formulas provided by the Coh-Metrix computational tool. Suitability and exploitability were evaluated using quantitative and qualitative data collected through questionnaires and focus group discussions and analyzed accordingly. The findings revealed notable mismatches in reading texts' readability, suitability and exploitability to the level used and shortcomings judged in either of the criteria. For instance, passages with appropriate readability levels to the grade appear either unexploitable or unsuitable, or vice versa. Moreover, the readability of grade eleven and twelve texts is poorly correlated with the readability of passages in the EUEE English examination. These results highlight the need for stakeholders in teaching and testing responsibilities to prioritize the alignment of readability, suitability and exploitability of reading passages so that students learn from fitting materials.

Keywords: Coh-Metrix, readability, suitability, exploitability

1. Introduction

It has been acknowledged that the development of reading skills depends not only on the reader (Wu & Hu, 2007) but also on the selection of reading texts

(Nuttall, 2005) making the process imperative. Besides, selecting reading texts suited for the development of other language elements is a prior issue in language teaching. However, finding

readable, suitable and exploitable reading texts is not an obvious and simple task. Selecting reading texts based on the individual judgment of writers which is often practised overestimates students' ability leading to the inclusion of texts above the level of students (Kasule, 2011). Also, the selection of reading texts inconsiderately minimizes and deteriorates students' reading skills progress (Begeny & Greene, 2013). On the other hand, the worth of readability formulae has been questioned.

Evidence indicates that textual and non-textual factors determine the development of reading skills (Crossley, Greenfield & McNamara, 2008; Janan, 2011; Wray and Janan, 2013; Bryce, 2013). For instance, Crossley, Greenfield & McNamara (2008) conclude that linguistic variables significantly predict readability than surface variables while Janan (2011) concludes that readability involves both reader and text factors. On the other hand, Wray & Janan (2013) claim students' experience of successfully reading complex texts correlates positively with their readiness to tackle different reading materials.

Mismatches in text readability, suitability, and exploitability can have far-reaching consequences for students' language development and overall academic performance. When reading texts exceed students' proficiency levels, learners may struggle with comprehension, leading to frustration, disengagement, and a decline in motivation to read (Kasule, 2011). Overly challenging materials can also impede the development of foundational reading skills

and prevent students from progressing to higher levels of language proficiency. Conversely, texts that are too simplistic fail to challenge learners, limiting opportunities to enhance critical thinking and analytical skills. Similarly, texts lacking suitability in terms of cultural relevance or learner interests may alienate students, reducing their engagement and willingness to interact with the material. Finally, reading texts that lack exploitability—opportunities to apply linguistic concepts, infer meaning, or practice targeted language skills—undermine the effectiveness of language instruction, leaving learners ill-equipped to tackle real-world communication tasks. These mismatches emphasize the need for careful selection of reading texts that align with students' linguistic capabilities, interests, and educational goals to ensure meaningful and sustainable learning.

However, empirical and inclusive evidence on the readability, suitability and exploitability of reading texts in general and in EFL textbooks and Ethiopian university entrance examinations (hereafter, EUEE) English language examinations in particular is rare. Also, how far the readability, suitability and exploitability of reading texts influence students' comprehension and achievement has not been established. In light of this, researching reading texts in EFL textbooks and EUEE English language exams is fundamental. As a result, this study explores the readability, suitability and exploitability of reading texts. The study also compares the readability, suitability and exploitability of reading texts in grades eleven and twelve textbooks with those in

EUEE English language exams. This would have both theoretical and practical contributions in the effort to match texts to the readers.

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1. What is the readability level of reading texts in EFL textbooks and Ethiopian University Entrance Examinations (EUEE)?
2. How suitable are the reading texts in EFL textbooks and EUEE for the intended learners?
3. To what extent are the reading texts in EFL textbooks and EUEE exploitable for language learning purposes?

4. How do the readability, suitability, and exploitability of reading texts in EFL textbooks compare with those in EUEE English language exams?

1.1. Selection of reading texts

Efforts to objectively and systematically measure text difficulty and match it with readers resulted in different readability formulae. However, most text-based readability measures assume comprehension difficulty is due to either semantic or syntactic complexity (Chall & Dale, 1995) wherein more frequent words and shorter sentences are associated with readable text. Thus, these readability formulae were narrowly conceptualized (Janan, 2011) and less predictive of text difficulty (Crossley *et al.*, 2017) making the unidimensional assessment of readability problematic. Recently multidimensional formulae of readability including coh-metrix (Crossley, Greenfield, and McNamara, 2008) are introduced. Nonetheless, whether the quantitative measure of readability is unidimensional or multidimensional, Fisher & Frey (2014) and Hiebert & Pearson (2014) recommend supplementing the measure with qualitative considerations. Fisher & Frey (2014) suggest four qualitative factors including levels of meaning and purpose, structure, language conventionality, and clarity and knowledge demands on readers. Moreover, Crossley *et al.* (2017) and De Clercq *et al* (2014) argue that classic readability formulae are less predictive of comprehension. As a result, a measure of readability applicable in different contexts is not yet available making selection of readable texts challenging.

Suitability is concerned with whether a text interests and challenges readers (Brown, 2001, Nuttall, 2005). For Nuttall (2005), selecting suitable texts that interest learners is more critical than its readability or exploitability. Interesting texts are texts that deal with situations or ideas students perceive as meaningful to give them a purpose for reading (Hetherington, 1985). To be enjoyable and challenging, reading texts have to introduce readers to new and relevant ideas, make them think about things they haven't thought about before, and help them to understand the way other people feel or think (people with different backgrounds, problems, or attitudes from their own), make them want to read for themselves. Hetherington (1985) argues the idea of measuring the readability of a text must be replaced by the notion of a text's suitability for a particular group of learners while Burns, Roe, and Smith (2011: 110) emphasize the relevance of content and level of difficulty of a text. Hence, suitability has to consider what readers bring to the reading task in view of their higher degree of individuality.

Exploitability, for Nuttall (2005), refers to the level of facilitation of learning a reading text can permit. The reading texts need to develop readers' skills to extract content from the language that expresses it (ibid). Selection of a reading text, thus, has to take whether the text helps the development of interpretive skills and methods. In this regard, a reading lesson based on an exploitable text focuses on neither language nor content, but the two together. As a result, an effectively exploitable text will develop interpretive

skills that can be applied to other reading contexts. Hence, exploitability focuses on selecting reading texts that have the potential to be exploited not only to develop reading strategies and skills but also language proficiency.

This unearths the fact that the selection of reading texts has to be considerate of both textual and non-textual factors (Crossley, Greenfield & McNamara, 2008; Janan, 2011; Wray and Janan, 2013; Bryce, 2013). Crossley, Greenfield & McNamara (2008) conclude that linguistic variables contribute significantly to better readability prediction than the surface variables used in traditional formulas. Janan (2011) concludes that readability is a complex matching process involving the dynamic interaction of both reader and text factors comprising physical features of the text, genre, content, author, linguistic difficulties, legibility, illustrations and organization of the text. On the other hand, Wray and Janan (2013) synthesized the arguments for the introduction of more complex texts to secondary school students claiming that students' experience of reading complex texts correlates positively with their readiness to tackle materials.

Current research on reading shows that textual and non-textual factors impede reading comprehension and development of reading skills (Crossley, Greenfield and McNamara, 2008; Janan, 2011; Wray and Janan, 2013; Bryce, 2013). Crossley, Greenfield and McNamara (2008) conclude that linguistic variables related to cognitive reading processes contribute significantly to better readability prediction than the surface variables used in traditional

formulas. Janan (2011) concludes that readability is a complex matching process involving the dynamic interaction of both reader factors including interest, prior knowledge, attitude, reading ability, motivation, the purpose of reading, engagement, age and gender and text factors comprising physical features of the text, genre, content, author, linguistic difficulties, legibility, illustrations and organization of the text. On the other hand, Wray and Janan (2013) synthesized the arguments for the introduction of more complex texts to secondary school students claiming that students' experience of successfully reading complex texts correlates positively with their readiness to tackle different reading materials. Nonetheless, none of these studies explore the readability, suitability and exploitability of reading texts. A readable text may not be exploitable or suitable, or vice versa.

Local studies studied reading from different vantage points. For instance, Getinet (2018) cited in Simachew and Manyazewal (2020) studied the appropriateness of grade nine English reading texts from the perspective of teachers and students from readability, exploitability, socio-cultural content and students' background perspective of teachers and students. Simachew and Manyazewal (2020) assessed the appropriateness of reading passages in the grade seven English textbook revealing the textbook lack of interestingness, authenticity and sufficient vocabulary. These studies, however, did not determine the readability, suitability and exploitability of reading texts which contribute to the development of skills. For instance, none of

these studies revealed the readability, exploitability and suitability level of the texts both in the grade eleven and twelve textbooks and EUEE exams mixing quantitative and qualitative measures as suggested by Fisher & Frey (2014) and Hiebert & Pearson (2014). A comprehensive and precise conception of readability, suitability and exploitability of reading texts is far from agreement. In light of this, researching reading texts in EFL textbooks and EUEE English language exams is fundamental in the effort to match texts to readers. Thus, this study explores the readability, suitability and exploitability of reading texts in the grades eleven and twelve textbooks and EUEE English language exams.

2. Research Methodology

2.1. Research design

This study explores the readability, suitability, and exploitability of reading texts in the grades eleven and twelve textbooks and EUEE English language exams. The explanatory sequential mixed method design (Creswell, 2014) allowed for the merging and uniting of both quantitative and qualitative data (Creswell, 2008) on the readability, suitability, and exploitability of a sample of reading texts.

2.2. Data collection tools

To discern the views of students and teachers about the suitability, exploitability, and readability of texts, quantitative data has been gathered using a reading text evaluation scale (Ling, Tong & Jin, 2012). Moreover, the reading texts are examined using the coh-Metrix readability formula

(Crossley, *et al*, 2008). Afterwards, qualitative data on the suitability, exploitability, and readability of reading texts has been secured through content analysis and FGDs. Qualitative rubrics of Fisher & Frey (2014) have also been used to address levels of meaning and purpose, clarity, and knowledge demands on readers from the perspective of teachers. All of the reading texts are considered for readability analysis using the coh-metrix readability formula and qualitative analysis via Fisher and Frey (2014) rubrics. Issues of suitability and exploitability of reading texts further require detailed descriptions of reading texts in view of the actual situations of using the texts.

2.3. Sample and sampling techniques

This study involved a purposive (based on accessibility and experience of teachers) sample of preparatory schools. All the EFL teachers and a representative sample of preparatory-level students in Debre Markos, Dejen, Amanuel and Bichena responded to a questionnaire. Also, the teachers participated in FGDs.

2.4. Data collection and analysis procedures

The data has been collected in three stages. First, quantitative content analysis on the readability, suitability and exploitability of reading texts was carried out to determine suitability, exploitability and readability of reading texts. The content analysis was carried out using CohMetrix (Crossley, *et al*, 2008, 2008) and two other readability formulae. Then, students in the four schools responded to the questionnaire. Afterwards, qualitative content analysis on the readability, suitability and exploitability of

reading texts was carried out by a careful reading by five experienced teachers on the reading texts and activities drawn from the text to make a qualitative examination of the texts focusing on qualitative factors (Fisher and Frey, 2014). These findings are further explained through FGDs.

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3. Results and Discussion

So far, readability has been primed as the sole parameter for selecting reading texts. Also, readability has been built on narrowly conceived predictors including sentence length and word level predictors of comprehension. On top of this, the selection of texts for readability reasons alone is limiting and limited. In contrast, a holistic approach is taken in presenting respondents' ratings of reading texts. The participating students rated the readability,

suitability and exploitability of the reading texts in the grade eleven and twelve

textbooks and University entrance examinations as shown in the table below.

Table1. Students overall rating of reading texts.

Parameter	Source of passages	Mean	SD
Readability	Grade 11	2.89	1.398
	Grade 12	3.04	1.246
	EUEE	3.01	1.581
Suitability	Grade 11	3.52	1.079
	Grade 12	3.61	1.193
	EUEE	2.93	1.544
Exploitability	Grade 11	3.40	1.069
	Grade 12	3.54	1.105
	EUEE	3.19	1.630

Respondents' overall rating of the readability and suitability of grade 11 and EUEE texts appears lower than grade 12 texts. Also, respondents' overall rating of the exploitability of grade 12 reading texts is higher than the exploitability of grade 11 and EUEE texts. Specifically, the mean value of the readability of the grade 11 textbook [M=2.89] and EUEE exams [M=3.01] is slightly below the grade 12 [M=3.04] reading texts, as displayed in table 1 above. Also, the mean value of the suitability of reading texts in the EUEE [M=2.93] and grade 11 textbook [M=3.52] is slightly below the grade 12 [M=3.61] reading texts. The mean value of students' rating of the exploitability of reading texts in the grade 12 textbook [M=3.54] slightly exceeds the exploitability of texts in the EUEE [M=3.19] and grade 11 textbook [M=3.40]. This shows failure to establish natural progression in the complexity of reading texts.

Respondents rated, *Medical Innovators*, *HIV/ AIDS in Africa*, *The Impact of Tourism*, *Disability is No Obstacle to Success* and *Beware the digital age* highly readable. On the other hand, the passages *Night of the Scorpion* and *Leaving Miguel Street* are rated difficult or very difficult. In the grade twelve textbook, passages entitled *a childhood memory*, *Communication in the Animal World*, *Markos' World*, and *Broken Britain* are rated difficult or very difficult by a considerable section of respondents as depicted in table 2 above. The passages *China's one-child Policy* and *Coffee Production* are rated very easy. Passages in the EUEE English booklet are also rated inconsistently. For instance, the passages entitled *The Power of Advertising* and *Our Dogs Are Watching Us* are rated readable.

The passage *Student exam and essay cheating* and *Blackwell* are rated difficult or very difficult by a considerable percentage of the respondents.

Table 2. students' rating of the readability, suitability, and exploitability of reading texts

Source	Reading texts	Readability		Suitability		Exploitability	
		Mean	SD	Mean	SD	Mean	SD
Grade 11	Oweka learns a lesson	2.27	1.081	2.81	1.014	2.11	1.060
	Medical innovators	2.46	.896	3.87	1.065	2.43	.872
	Night of the Scorpion	2.81	.817	3.64	1.291	2.67	.813
	HIV / AIDS in Africa	1.79	.776	2.42	1.203	2.96	1.263
	The impact of tourism	2.14	.864	3.51	1.414	3.06	1.433
	Leaving Miguel Street	2.86	1.162	3.43	1.204	3.12	1.447
	The challenge of climate change	2.60	1.222	3.57	1.274	3.19	1.477
	Disability is no obstacle to success	2.23	.662	3.75	1.191	3.22	1.106
	Saïda has been found	2.36	1.079	3.25	1.294	3.29	1.512
	Beware the digital age	2.83	2.280	4.13	3.010	3.30	1.210
Grade 12	A childhood memory	2.42	.986	3.21	1.426	3.34	.947
	China's one-child policy	1.74	.874	3.29	1.412	3.37	1.428
	Communication in the animal world	2.67	1.203	4.03	1.108	3.40	1.354
	The development of communication	2.32	.929	3.79	1.315	3.40	1.516
	Problem page	2.50	1.273	3.33	.908	3.43	1.167
	A character from a novel	2.29	1.044	3.61	1.064	3.45	1.168
	What is good governance?	2.07	.968	3.36	1.186	3.48	1.507
	Coffee production	2.08	1.118	3.73	1.179	3.52	1.564
	Multilaterals	2.54	1.023	3.68	1.280	3.56	1.324
	The story of life on Earth	2.52	1.033	4.06	.898	3.56	1.164
	Three African civilizations	2.91	1.485	3.31	1.348	3.59	1.075
	Markos' world	2.52	1.481	3.76	.840	3.59	1.166
	Broken Britain	2.95	1.370	3.52	1.110	3.63	.991
	The power of advertising	2.85	1.241	3.18	1.187	3.65	.964
EUEE	Elizabeth blackwell	2.53	.954	3.53	1.110	3.73	1.360
	student exam and essay cheating	3.23	1.085	2.98	1.240	3.75	1.378
	our dogs are watching us	2.69	.992	3.38	1.419	3.80	1.226
	UN	2.87	.799	2.55	1.013	3.93	.990
	Businesses Can Build Workforces	2.52	.960	3.60	1.088	3.98	.975

Thus, the readability of reading texts in the grade 11 and 12 textbooks has a mean

readability rating (ranging from 1.79 to 2.86 and 1.74 to 2.95, respectively)

indicating that the texts are moderately easy to moderately difficult to read. Conversely, students' ratings of reading texts in EUEE, ranging from approximately 2.52 to 3.23, show a mean readability score of moderate difficulty. Respondents' rating of the suitability scores for grades 11 and 12 as well as EUEE texts suggest that the texts are perceived as moderately suitable. While the mean exploitability scores for grade 12 and EUEE texts indicate a moderate to high potential for being exploited or utilized effectively the rating for grade 11 texts suggests a moderate to high potential for being exploited or utilized effectively. Overall, Grade 11 texts tend to have lower readability and suitability scores compared to Grade 12 and EUEE texts, while EUEE texts exhibit higher exploitability ratings.

During the FGDs, teachers echoed these inconsistencies. For instance, though most of the students rated the passage medical innovators as easy, a teacher in Amanuel claimed that the passage is demanding. The FGD discussant argued that though the text 'is not a poem or literature', it is too long and contains too difficult vocabulary items. The FGD discussants accepted that passages *HIV/ AIDS in Africa*, *The Impact of Tourism*, and *Beware the Digital Age* likewise are readable. Interestingly, FGD discussants claimed that some passages rated difficult or very difficult by student respondents are considered demanding. For instance, they argued that the poem parts, the short stories, and nobles such as *Night of the*

Scorpion, *Oweka learns a lesson* and *leaving Miguel street* are demanding.

On grade twelve reading texts, serious readability concerns were raised. For instance, AA4 reiterates:

As, I mentioned, for instance, when we take texts which are extracted from newspapers, they are very much difficult. Like for example the text entitled Broken Britain. That text is taken from the newspaper. So that the words that are included in that text may not be familiar with the learners even for us as well. So such texts must be considered.

This implies that passages in the grade twelve textbook are of lower difficulty. Exceptions for this include those extracts from news articles including the passage entitled *Broken Britain*. In this passage, the FGD discussants claimed difficulty relates not only to sentence length and vocabulary challenges but also to cultural strangeness.

Respondents were also asked for their views about the sources of readability levels of the reading texts. Of the respondents, 23.2% disagreed while 56.5% responded undecided on whether the passages are difficult due to the difficulty of new words. Similarly, 20.8% and 26.1% strongly disagreed and disagreed that the passages contain new

words worth learning at this grade level. Regarding the worthiness of the new words at the level, nearly half (46.4%) of

the respondents are undecided if the new words are worth learning at the grade level.

Table 3. reasons for students' rating of the readability, of reading texts

The passages:	Level of agreement					Mean
	SD	D	U	A	SA	
are difficult due to difficulty of new words.	9(4.3)	48(23.2)	117(56.5)	27(13)	6(2.9)	2.87
contain new words worth learning at this level.	43(20.8)	54(26.1)	96(46.4)	6(2.9)	8(3.9)	2.43
contain not too many new words.	10(4.8)	73(35.3)	94(45.4)	2(1)	28(13.5)	2.83
introduce new words from simple to complex.	5(2.4)	7(3.4)	81(39.1)	31(15)	83(40.1)	3.87
are difficult due to sentence length.	25(12.1)	8(3.9)	27(13)	73(35.3)	74(35.7)	3.79
sentence gradually increases in complexity.	52(25.1)	68(32.9)	57(27.5)	9(4.3)	21(10.1)	2.42
use archaic or scholarly language.	3(1.4)	52(25.1)	56(27.1)	15(7.2)	81(39.1)	3.57
demand you read beyond your experience.	5(2.4)	45(21.7)	13(6.3)	77(37.2)	67(32.4)	3.75
demand you read beyond your education.	26(12.6)	25(12.1)	32(15.5)	71(34.3)	53(25.6)	3.48
demand you beyond your cultural experiences.	2(1)	34(16.4)	28(13.5)	54(26.1)	88 (42.5)	4.13

On whether the passages contain not too many new words, 35.3 disagree while 45.4 hold undecided. On the presentation of the words, the majority of the respondents (40.1%) strongly agreed that reading passages contain new words introduced from simple to complex while 15 agreed as displayed in table 3 above. Only 2.4 and 3.4% of the participants strongly disagreed and disagreed with the statement implying doubt on the presentation. Asked to determine if the passages are difficult due to sentence length '35.3 and 35.7% agreed and strongly agreed, respectively. The majority strongly disagreed 25.1% and disagreed (32.9%) while about 27.5% reported undecided that the passages contain sentences the structures of which gradually increase in complexity.

Likewise, during FGDs teachers revealed that the difficulty of reading passages

stems from the difficulty of new words, length of sentences and literariness of texts. For instance, AAI in Amanuel secondary and preparatory school argued that:

Some are easy most are difficult. For example the text about tourism. The text about technological advances, weather and water are okay to understand even though they are too long. But if you take texts which are taken from literature, especially poem parts, the short stories and nobles such as Night of the Scorpion, this is a poem a very difficult poem. Even I can't track it easily to understand and answer questions which are over there. Oweka learns a lesson. This is a short story and leaving Miguel Street. Even even though it is not a poem

or literature medical innovators. There are four or five texts about this one but they are too long as well as the vocabularies are too difficult.

In this extract, the teacher underlines that sources of difficulty of reading passages are varied and complex. The teacher indicates that though lengthy passages are demanding students can make efforts to understand them. However, literary texts that contain many new words organized in lengthy sentences are much more demanding.

Another teacher further strengthens the points stating that readability problems are complicated. *the topic it is interesting. The learners are interested to read what childhood*

memory to rehearse their experiences or others to learn. But When you come to the passage it is loaded. Many vocabularies. It is loaded. At that time the students are challenged even if they are interested to read and the topic is interesting if the passage is full of vocabularies. So, this can be taken as a challenge.

As stated in the above extract, the FGD participant revealed that passages are loaded with unfamiliar words though they seem interesting to the students. The implications of presentation and use of literary or archaic words is predominated with challenges due to sentence length and use of new words.

Given inconsistent findings, the researchers resorted to use readability formulae.

Table 4. correlation of readability of reading texts

		Correlations			
		Readability (Mean)	Readability grade 11	Readability Grade 12	Readability EUEE
Readability (Mean)	Pearson Correlation	1	.642**	.726**	.619**
	Sig. (2-tailed)		.000	.000	.000
	N	207	207	207	207
Readability grade 11	Pearson Correlation	.642**	1	.226**	.102
	Sig. (2-tailed)	.000		.001	.144
	N	207	207	207	207
Readability Grade 12	Pearson Correlation	.726**	.226**	1	.152*
	Sig. (2-tailed)	.000	.001		.029
	N	207	207	207	207
Readability EUEE	Pearson Correlation	.619**	.102	.152*	1
	Sig. (2-tailed)	.000	.144	.029	

****.** Correlation is significant at the 0.01 level (2-tailed).

***.** Correlation is significant at the 0.05 level (2-tailed)

Once the mean of the readability level of passages in the grade eleven, twelve and EUEE has been identified, efforts were made to determine correlations in students' ratings of the readability of passages in each category. As displayed in table 4 above, the Pearson correlation coefficient between the overall mean readability and the readability for Grade 11 and Grade 12 as well as EUEE texts is 0.642, 0.726 and 0.619, respectively. This suggests a strong positive correlation. On the other hand, the correlation coefficient between the readability texts in grade 11 and grade 12 texts, grade 11 texts and EUEE texts, and grade 12 texts and EUEE is 0.226, 0.102,

and 0.152, respectively suggesting statistically weak correlations. Overall, there appears to be a strong positive correlation between the overall mean of readability of texts and the readability scores for individual grades, indicating consistency in readability levels across different sources. However, the correlations between the readability scores for different grades are weaker, suggesting some variability in readability between different grade levels. As a result of this controversial finding, further efforts were made to check the readability of passages using readability formulas.

Table 5. readability of reading texts in different formulae

Source of texts	Readability indices in different formulae		
	FRES	FKGL	RDL2
Grade eleven mean	64.25	8.19	13.03
Grade twelve mean	64	8.49	15.69
EUEE mean	51.28	11.23	15.379

Indices in the table 5 above provide insight into the mean readability levels of texts from different sources. Grade 11 texts have higher readability scores compared to grade 12 texts and EUEE texts, indicating they are relatively easier to read. EUEE texts tend to have the lowest readability scores among the three sources, suggesting they may be more challenging to comprehend. This is in contrast to students' ratings, however.

To determine, the source of variability in readability, the Coh-Metrix L2 Readability (RDL2) (Crossley, Allen, & McNamara, 2011; Crossley, Greenfield, & McNamara, 2008) has been instigated. The Coh-Metrix RDL2 index, in contrast to traditional measures of text readability, claims to have the potential to offer a more complete picture of the potential challenges and scaffolds in texts for readers. To that end, a multivariate analysis of variance (MANOVA) was conducted to examine the

differences in various linguistic features across grade levels (grade 11&12) and EUEE exam texts. The analysis included measures of narrativity, syntactic simplicity, word concreteness, referential cohesion, deep cohesion, verb cohesion, connectivity, and temporality. The MANOVA revealed no statistically significant differences among the groups in terms of narrativity ($F(2, 19) = 3.064, p = .070$), syntactic simplicity ($F(2, 19) = 3.421, p = .054$), word concreteness ($F(2, 19) = 2.870, p = .081$), referential cohesion ($F(2, 19) = .282, p = .758$), deep cohesion ($F(2, 19) = 1.551, p = .238$), verb cohesion ($F(2, 19) = .305, p = .741$), connectivity ($F(2, 19) = .116, p = .891$), or temporality ($F(2, 19) = .419, p = .664$). also, Post- hoc tests using Tukey's HSD and Bonferroni methods confirmed that there were no statistically significant differences in these linguistic features between any pairs of groups. Comparisons across different grade levels and EUEE do not show statistically

significant differences. Of course, there is a marginally significant difference in narrativity scores between grade 12 and EUEE, with texts in the grade 12 textbook having a higher mean narrativity score. In conclusion, the MANOVA results suggest that there are no significant differences in the linguistic features examined among Grade 11, Grade 12, and EUEE groups. Consequently, it may be stated that there is no natural progression in the readability of the texts across grade levels.

Suitability of Reading Texts

Findings on the readability of reading texts are subsequently followed up by issues of suitability which relate to whether a reading text is interesting, enjoyable and challenging for readers. To determine participants' views on the overall suitability of the content of reading texts, a set of items were asked. Responses of students, as displayed in the table below showed inconsistencies.

Table 6. Suitability of Reading Texts

Do the passages	SD	D	U	A	SA	Mean	Std. Dev
make you read more about the topic of the reading text?	23(11.1)	104(50.2)	31(15)	44(21.3)	5(2.4)	2.54	1.023
contain sentences loaded with multiple layers of meaning?	28(13.5)	29(14)	27(13)	56(27.1)	67(32.4)	3.51	1.414
require readers to determine the theme of passages?	6(2.9)	31(15)	34(16.4)	64(30.9)	72(34.8)	3.80	1.156
give you a meaningful purpose to read?	45(21.7)	59(28.5)	15(7.2)	45(21.7)	43(20.8)	2.91	1.485
suit tasks to develop reading skills?	66(31.9)	60(29.0)	31(15)	8(3.9)	42(20.3)	2.52	1.481

Majority of the respondents strongly disagreed and disagreed with the statement that the passages make them want to read more about the topic, as displayed in table 6. The share of respondents who strongly agreed and agreed on the sentences in the passage loaded with multiple levels of meaning exceeds those who strongly disagreed and disagreed with it. Likewise, more than half (30.9 and 34.8%) of respondents agreed and strongly that the passages in the textbook require readers to determine the theme of the passages. On whether the reading passages give readers a meaningful purpose, 21.7% strongly disagreed while 28.5% disagreed. Nonetheless, 21.7% and 20.8% also strongly agreed and agreed on the statement. On whether the reading passages suit tasks to develop reading skills, the sum of those who disagreed exceeds those who disagreed. The percentage of students who strongly disagreed and disagreed with the statement is 31.9% and 29% as compared to those who disagreed and strongly disagreed.

Passages HIV / AIDS in Africa and *Oweka learns a lesson* in the grade eleven textbook; *Problem page* and *Multilaterals* in the grade twelve textbook, together with *student exam and essay cheating* and *UN* in EUEE are passages rated unsuitable respondents, respectively.

A majority of the passages are rated either unsuitable or very unsuitable. For

instance, the passages *Night of the Scorpion*, *The impact of tourism*, *Leaving Miguel Street*, *Disability is no obstacle to success*, *Saïda has been found* and *Beware the digital age* in the grade eleven textbook are rated unsuitable. Of the passages in the grade twelve textbook, *A childhood memory*, *Communication in the animal world*, *Problem page*, *What is good governance?*, *The story of life on Earth*, *Three African civilizations* and *Markos' world* are rated suitable and very suitable. Of the passages from the EUEE, *Broken Britain*, *Blackwell* and *student exam and essay cheating* are rated suitable or very suitable by more than half of the respondents.

This is against teachers' points in the FGDS. For instance, a teacher in Debre Markos raised concerns that jeopardize interestingness.

when I see passages found in both grade eleven and twelve, as to me most of them are taken from other African countries. It would be better if had taken from our country. For example, some are extracts from nobles from Kenya and other African countries. But if they are taken from Ethiopian nobles I think it would be good.

The teacher stressed that the cultural strangeness of the passages contributes towards the complexities of the passages. This further exacerbates difficulty instead of contributing towards interestingness.

Exploitability of Reading Texts

Exploitability of reading passages entails the extent to which the passages serve for and support the development of reading skills in extracting content from the language that expresses it. About 13.5% of students strongly disagreed while 45.9% disagreed that the reading texts introduce them to new things and concepts. The participants revealed that the '*reading passages introduce them to new ideas that make them think about things they haven't*

thought of before. On whether the reading passages help them understand the way others think, 12.6% strongly disagreed, 36.2% disagreed while 11.6% agreed and 22.2% strongly agreed. As of the table above 13.5% of the participants strongly disagree and 37.2% disagree on whether the passage *taught them how to identify the meaning of new words from context while* 21.3% agreed and 12.1% strongly agreed.

Table 7. Exploitability of Reading Texts

The passages	SD	D	U	A	SA	Mean	Std. Dev
introduce you to new concepts?	28(13.5)	95(45.9)	38(18.4)	41(19.8)	5(2.4)	2.52	1.033
help you understand the way others think?	26(12.6)	75(36.2)	36(17.4)	24(11.6)	46(22.2)	2.95	1.370
teach you identify meaning of new words from context?	28(13.5)	77(37.2)	33(15.9)	44(21.3)	25(12.1)	2.81	1.257
help you guess the meaning of new words without a dictionary?	24(11.6)	82(39.6)	81(39.1)	8(3.9)	12(5.8)	2.53	.954
contain words that can be replaced by simpler words?	9(4.3)	30(14.5)	119(57.5)	3(1.4)	46(22.2)	3.23	1.085
contain new words which are found in the subsequent chapters?	23(11.1)	99(47.8)	50(24.2)	25(12.1)	10(4.8)	2.52	1.004

A considerable percentage (11.6% and 39.6%) of the participants strongly disagreed that they could find out the meaning of some of the new words without the help of a dictionary. On the other hand, an insignificant percentage of the respondents agreed and strongly agreed with the statement displayed in table 7. About 4.3% and 14.5% of the participants strongly disagreed that the passages contain new words that can be replaced by simpler words.', while 22.2% strongly agreed. The statement on the occurrence of the new words in the subsequent chapters results in

11.1% strongly disagree and 47.8% disagree responses.

Also, students rated the exploitability of reading texts indifferently. For instance, passages *Leaving Miguel Street* (M=, SD=), *The challenge of climate change* (32.9%) and *Disability is no obstacle to success* (25.6%) are rated unexploitable. Likewise, *Oweka learns a lesson* is rated unexploitable and medium exploitable by 37.7 and 52.2% of students. On the other hand, passages, *Medical Innovators*, *Night of the Scorpion*, *The Impact of Tourism*, *Saïda has been found* and *Beware the*

digital age are rated either exploitable or very exploitable. On the matter of exploitability, FGD discussants revealed that the texts are of poor exploitability level. A teacher (AA4) in Amaneul argued:

when we see the texts, most of the texts are designed, I think, randomly. As far as I understood texts and tasks, they are not well designed. Instead, they simply formulate question to ask about the text. It may not focus on a specific task. Like for example when we see skim this text. But the question might be referencing or some questions might be inferences. So that the texts must be revised. So most texts, even when we see some texts they may not have questions that are asked according to the given text. Simply what do you understand and skim without giving any kind of tasks fitting with the text.

From this, we can deduce that reading texts are of poor exploitability level. The section of the passages did not consider if the texts fit into the presentation and development of different reading competencies. As a result, both students and teachers rated reading passages are of poor exploitability levels.

4. Discussion

Albeit agreements on the relevance of texts towards the development of reading skills, a unanimously acceptable conceptualization has not been evident for text selection or production. Importantly, positivist text-based advocates of text selection have been in place before the interpretivists (Janan, 2011; Wray & Janan, 2013). Interpretivists

who take a dynamic approach to text selection consider going beyond lexical frequency, sentence length and number of syllables in a word to consider readability as a product of reader, context and text. For instance, Chen & Meurers (2018) advanced that word frequency alone was capable of achieving an estimation of more than 60% text readability. Others, including Crossley, *et al.* (2017) and Crossley, Skalicky & Dascalu (2019) argued that these traditional readability formulas performed poorly in predicting readers' judgments of text comprehension introducing advanced NLP tools-based readability formulas. Different studies (cf. McNamara *et al.*, 2014; 2017) validated the RDL2 index reporting high correlations between RDL2 results and students' performance in reading comprehension activities. Associated with this was a claim that word concreteness, syntactic simplicity, referential cohesion, causal cohesion, and narrativity account for most of the variance in texts across grade levels and text categories (Graesser, McNamara, and Kulikowich, 2011).

Nonetheless, others questioned taking such a static and reductionist approach to assess texts in terms of linguistic features with no clear interpretation of the reader and task factor. For instance, readers' interest in a topic or their prior knowledge of it or the situation has to be taken into consideration (Janan, 2011; Wray and Janan, 2013; Halina Chodkiewicz, 2016). Interest, be it individual or situational is an important motivational predictor of reading comprehension (Schiefele, 1999, 2009; Soemer & Schiefele, 2019; Nordin & Eng,

2017). Thus, one thing educators shall institute to make reading materials relevant to EFL learners requires understanding the genre and content of a text. This, in addition to the readability of a selection, posits the place of suitability and exploitability of reading texts.

Results of descriptive analysis on students' ratings and coh-Metrix outputs converge to the first research question that the majority of texts are readable. Notably, the passages *China's one-child Policy* and *Coffee Production* from the textbook and *The Power of Advertising* and *Our Dogs Are Watching Us* E from UEE English booklet are rated readable. This is in contrast with the passage *Student exam and essay cheating* and *Blackwell* which the majority of the respondents rated difficult or very difficult. In addition to genre similarity, the distinction between these groups of texts cannot be explained at linguistic levels as the coh-metrix RDL index failed to indicate variances. The Coh-Metrix L2 Readability (RDL2) score did not discriminate the texts that the students rated readable. This is in contrast to claims that the Coh-Metrix offers a more complete picture of the potential challenges that may be faced by a reader as well as the potential scaffolds that may be offered by the text.

During FGDs, teachers corroborated these findings claiming that text selection should consider non text factors in addition to text readability. Discussants focused on a passage entitled *Night of the Scorpion* to justify claims that difficulty relates not only to sentence length and vocabulary challenges but also to cultural strangeness

and difficulty of items drawn from the poem. In this extract, the teacher underlines that sources of difficulty in reading text are varied and complex. This underlines that the length of sentences and difficulty of vocabulary items explain only part of readability problems. However, literary texts that contain many new words organized in lengthy sentences are much more demanding. Notably, a passage entitled *childhood memory* which teachers and students rated highly interesting but difficult due to the frequency of challenging vocabulary items. This ascertains the need for a blending of the strengths of the positivist and the interpretivist paradigms to determine readability. This combination could be used to investigate what is happening while readers read and how this is related to readability.

Prior research (Janan, 2011; Fisher & Frey, 2014; Hiebert & Pearson, 2014) supports calls to match the reader and texts. While increasing reading expectations and difficulty of texts without concomitant attention to instruction may not result in improved reading achievement, extracts from literary genres indicate otherwise. In this text, levels of meaning which include the density of the ideas and the use of figurative language associated with text difficulty measurable by an attentive human reader. In other words, determining readability based on quantitative measures of any kind is misleading and fallible.

The second research question focused on suitability which determines whether a

reading text suits for targeted readers in terms of cultural sensitivity, relevance, and the appropriateness of the content. Implicating relevance, the majority of respondents rebuffed the statement that the passages make them want to read more about the topic. This is followed by a higher percentage of respondents accepted the passages are loaded with multiple levels of meaning. Likewise, respondents opined that the reading passages do not suit tasks to develop reading skills.

Notable passages in the grade eleven textbook rated highly unsuitable by students include passages *Night of the Scorpion*, *The impact of tourism*, *Leaving Miguel Street*, *Disability is no obstacle to success*, *Saïda has been found* and *Beware the digital age*. This contrasts with teachers' points in the FGDS. For instance, a teacher raised concerns that cultural strangeness of the passages contributes towards the strangeness of the passages. This further exacerbates difficulty instead of contributing towards interestingness.

While reading passages are expected to make students read more about the topic putting in efforts to sustain reading experience, loaded passages with multiple levels of meaning that do not suit the development of reading skills are apparent. In contrast, Lim (2019) advocated for a consideration of text potentiality for participation and sustained and enjoyable reading experiences aside from familiarity. Understandably, this is because a reader who enjoys reading a text will likely put in effort to sustain the reading experience.

However, reading passages that do not make students read more about the topic because of multiple levels of meaning would not suit the development of reading skills are apparent.

The third research question addressed exploitability which involved considerations of opportunity in reading texts to be integrated into tasks and develop skills. Exploitable texts contain ambiguous language, or subtle cues that can be misinterpreted. Passages *Leaving Miguel Street*, *The challenge of climate change* and *Disability is no obstacle to success* are rated unexploitable. This has been attributed to different aspects of ineffective selection. Texts that serve a purpose should be selected only when that purpose can be best served through that text. Asking students to guess the meaning of words based on contextual clues when the clues are not given in the text is worth nothing. Relating to this, participants opined that texts do not enable them to find out the meaning of some of the new words without the help of a dictionary. Among others, passages including *the challenge of climate change* and *Disability is no obstacle to success* are rated unexploitable due to these reasons. Likewise, to ask for inferencing questions when the text doesnot serve that purpose is reductionist. Thus, reading texts that did not consider if the texts fit into the presentation and development of different reading competencies are of poor exploitability level.

5. Conclusions and Implications

This study investigated the readability, suitability and exploitability of the reading texts using content analysis, questionnaires and FGDs. The sample of this study consisted of preparatory school students and teachers in EGZ. A total of 207 questionnaires were returned, and 10 FGDs were carried out. The results revealed that the students did not enjoy the reading texts. Asked whether they enjoyed reading texts in grade eleven and twelve textbooks and EUEE English booklets students reported inconsistent experiences. Results of the questionnaire revealed that grade eleven texts are less readable and less enjoyable compared to those in the grade twelve textbook. The mean score of the readability of passages demonstrates that passages provided for 12th grade lack difficulty and seem to be a step back from what is asked of students in 11th grade. During FGDs, participants stated that their students do not enjoy the texts as they find them loaded and not graded appropriately.

Participants claimed that texts were too long and difficult to understand. According to questionnaire results, students tended to think that reading texts were not easy and included many new words or complex sentences. During the FGDs, they supported these results. Students also considered the length of the sentences in the texts unsuitable for their level, only two of them did not express an opinion about it.

Also, participants raised doubts about the usefulness of the reading texts. They insisted that the passages were not introducing them to new ideas, and they did not help them to understand the way others

feel or think. As it was found that they did not enjoy the content of the reading texts, this result supported their previous views.

Another important finding is that the reading passages in the grade eleven and twelve textbooks are not exploitable in the way EUEE passages are. This, often makes students and teachers underestimate the worth of reading passages in the textbooks. Likewise, the readability of passages in EUEE does not show strong correlations with passages in the grade eleven textbook. This implies that passages in EFL textbooks and EUEE do not show a natural progression in terms of readability.

Accordingly, it is recommended that all stakeholders in both teaching and testing be aware of the readability, suitability and exploitability of reading passages so that students receive the most benefit from the materials. Material developers need to consider the worth of considerations to the examination of potential texts in view of their readability, suitability and exploitability.

6. Limitation

The present study focused on analyzing the readability, suitability and exploitability levels of reading passages. However, when estimating the difficulty level of the reading texts, other fundamental considerations, such as the readers and the reading tasks or activities, should be taken into account. The interaction of the readers and the target reading texts in terms of reading proficiency levels, motivation, and reading purposes affects the comprehension process.

Moreover, the requirements of the reading tasks also influence how readers tackle a text. These factors were beyond the scope of the present study. Therefore, interpretation or generalization of the results of the present study should be taken with careful consideration.

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