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From Words to Understanding: Analyzing Lexical Density and Readability in Student Writing

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ARTICLE INFO	ABSTRACT
  How to cite: Ilma, D., Sembiring, F. E. D. R., Elchaira, N., Maharani, P., (2025). From Words to Understanding: Analyzing Lexical Density and Readability in Student Writing. LingPoet: Journal of Linguistics and Literary Research, 6(1), 63-73.	This study examines high school students' English writing skills after a month in an English course. The research used a qualitative methodology to analyse 10 student writings, assessing lexical density and readability levels, and their impact on comprehension and writing quality. Lexical density, the proportion of content words to function words, indicates informational richness, whereas readability evaluates the comprehensibility of text, measured by measures such as ASL and ASW. Results show that lexical density in student writings ranges between 48.54% and 56.07%, indicating moderately complex texts that may challenge learners depending on their proficiency. Texts with higher lexical density, characterized by frequent use of nouns and adjectives, present richer information, making them suitable for advanced learners but potentially difficult for beginners. Readability scores reveal that most texts are classified as "Very Easy" to "Easy," suggesting accessibility for lower-intermediate students. Only one text falls into the "Fairly Easy" category, indicating a progression toward more complex material. These findings show the need for teaching materials that match students' language skills, offering challenges to improve learning while staying understandable. The study suggests using glossaries or guiding questions for complex texts to help students of all levels understand better and learn more effectively. **Keyword:** Lexical density, Readability, Writing

1. Introduction

In recent years, the analysis of lexical density and readability has become increasingly significant as educators and scholars seek to understand text complexity and its impact on comprehension, especially in secondary education. Lexical density is defined as the ratio of content words like nouns, verbs, adjectives, and adverbs—to function words, including prepositions, conjunctions, and articles, is regarded as a valuable metric for evaluating a text's informational richness (B. Amer & Baarah, 2021; Clavel-Arroitia & Pennock-Speck, 2021). Texts characterized by high lexical density typically encompass a greater quantity of content words, indicating a more sophisticated or intricate composition. This complexity may present difficulties for readers, especially those who are enhancing their language proficiency or acquiring English as a second language (B.

Amer & Baarah, 2021). In educational settings, maintaining an appropriate lexical density is essential, as excessively dense texts might impede students' understanding, resulting in irritation or less enthusiasm to read.

Readability is concerned with the ease of understanding and processing written content. This is generally evaluated using readability indexes, such as the Flesch Reading Ease scale, which consider factors including sentence length and syllable count. Readability is crucial for facilitating language learning and literacy development, especially for non-native languages (Rizkiani et al., 2022). Research in this domain indicates that texts that are either simplistic or overly complicated may fail to sufficiently meet the learning requirements of pupils. When readability is properly calibrated, it can enhance reading experiences, promote engagement, and assist in the development of literacy and comprehension abilities.

Moreover, Lexical density and readability are essential elements in evaluating the complexity of written texts, especially in academic and educational settings. Research indicates that higher lexical density is often linked to greater text difficulty (Siregar et al., 2024; Syarif & Putri, 2018). Evaluating the student writings, such as thesis introductions and conclusions, shows consistently high lexical density and low readability scores, suggesting the use of complex academic language (Sinar et al., 2023; Siregar et al., 2024). Similar trends can be found in English textbooks, where lexical density and readability fluctuate depending on proficiency levels (Rizkiani et al., 2022). Lexical density has been suggested as a potential measure of language learning progress and the quality of writing (Elgobshawi & Aldawsari, 2022). However, the connection between text difficulty, lexical density, and readability is not always clear-cut (Miskiyah & Amalia, 2022).

The current study has demonstrated that achieving a balance between lexical density and readability in educational resources is essential for promoting effective learning. Secondary school textbooks are frequently examined for their linguistic characteristics, as an imbalance in lexical richness and readability can produce content that is either overly complex or inadequately stimulating for students at particular competence levels (Amer, 2021). Contexts of English as a Foreign Language (EFL) and English as a Second Language (ESL) pose distinct challenges in balancing these characteristics, since students typically require supplementary assistance to thoroughly understand intricate texts. Moreover, variations in linguistic and cultural backgrounds contribute to the intricacy of creating resources that are universally accessible to all learners. Research indicates that these disparities can profoundly affect students' comprehension and engagement with texts, underscoring the necessity of meticulous evaluation in educational contexts.

This study extends on previous research by analyzing lexical density and readability in English essays generated by high school students after one month of English instruction. Examining student-generated texts offers significant information into their ability to navigate and understand different levels of text complexity after a brief exposure to the language course. The study's emphasis on high school students corresponds with overarching educational objectives, wherein the cultivation of reading and writing skills is essential for academic achievement. Comprehending how these students interact with lexical density and readability in their writing might guide the choice of materials and teaching methods that more effectively facilitate their language acquisition process.

The outcomes of this study seek to enhance the existing research on text complexity and understanding within educational contexts. The research aims to elucidate the correlation between text complexity and student comprehension through the analysis of lexical density and readability. This subsequently guides instructors and curriculum designers in optimal material selection, guaranteeing that educational resources are both accessible and sufficiently difficult to foster meaningful learning.

Previous studies on high school English textbooks have identified considerable inconsistencies in lexical richness and readability, frequently suggesting that the materials may be excessively complicated or overly simplistic for their target audience. Amers (2021) discovered that Jordanian secondary English textbooks included lexical density surpassing the understanding capabilities of the intended students, highlighting the necessity for balanced content. Rizkiani et al. (2022) arrived at analogous conclusions in their examination of Indonesian high school textbooks, observing that texts with elevated lexical richness enhanced students' vocabulary yet posed challenges in the absence of suitable instructional support. These findings correspond with those of Choemue and Bram (2021), who contended that lexical density, diversity, and sophistication must be adjusted to fit with learners' language proficiency for maximal engagement and comprehension.

Alongside lexical density, readability has been examined in various linguistic and cultural contexts, highlighting its significance across different educational systems. Maamuujav (2021) examined the lexical density in adolescent L2 writings, revealing that diminished readability frequently corresponded with decreased comprehension. This indicates that readability evaluations might function as essential instruments for curriculum developers and instructors to guarantee content accessibility. Nkhobo and Chaka (2023) employed Coh-Metrix to evaluate readability indices in student writings, discovering that syntactic complexity and low readability scores were significant obstacles to comprehension in their student samples. Zhu et al. (2023) observed a rise in lexical density with time in academic writings, especially in fields that typically prioritize high lexical sophistication.

Corpus-based analysis and automated techniques have demonstrated efficacy in examining lexical characteristics in both student writing and published works. Putri et al. (2024) carried out a lexical density analysis on the compositions of IELTS Band 4 students to assess linguistic proficiency. Their research highlighted the correlation between increased lexical density and complex writing, stressing the importance of balancing lexical density and readability for EFL (English as a Foreign Language) learners. Automated Writing Evaluation (AWE) software has been implemented to enhance students' writing abilities by increasing readability, as demonstrated by Zulkornain et al. (2023). This technology-assisted method corresponds with earlier research that highlight the need of utilizing readability indices to adjust text complexity according to students' skill levels.

Research in ESL (English as a Second Language) and EFL contexts emphasizes the importance of lexical density and readability in language teaching. Clavel-Arroitia and Pennock-Speck (2021) analyzed lexical density and diversity in the written and spoken interactions of Japanese and Spanish students, concluding that written texts generally demonstrate greater lexical density than spoken language. These disparities highlight the necessity for content that caters to both written and oral language competencies, particularly for adolescent learners (Ando et al., 2021). Research by Maamuujav (2021) indicates that adolescent writers frequently encounter difficulties with texts that surpass their lexical ability, highlighting the necessity for carefully structured programs that incrementally enhance students' language proficiency.

Recent study highlights the persistent trend of increasing lexical density in academic texts, with studies by Amer and Baarah (2021) and Zhu et al. (2023) demonstrating a notable rise in complexity over time. This transition affects secondary school, as pupils are anticipated to develop fundamental abilities for further academic endeavors. Choemue and Bram (2021) discovered that ESL and EFL authors, especially in ASEAN nations, have distinct problems stemming from diverse linguistics origins, rendering readability and lexical density especially relevant metrics for evaluating academic writing quality. Similarly, Aswani et al. (2023) analyzed children's storybooks and identified varying degrees of lexical density, illustrating the intricate nature of content complexity in works designed for younger audiences.

Lexical density and readability are critical components in the creation and assessment of educational materials. The comprehensive research indicates a consensus on the necessity of aligning these elements with the cognitive and language abilities of learners. Considering the varied results from several studies, these insights will guide this study's methodology for examining lexical density and readability in student essays.

Lexical Density and Readability

Lexical density denotes the quantity of lexicalized information included within a particular grammatical unit. The ideal unit for quantifying lexical density is the ranking clause, which excludes rank-shifted or embedded clauses—these sentences are components of another clause and are thus counted within their host or matrix clause. The element to be quantified is the lexical item (or "lexeme") (Halliday & Webster, 2009). On the other hand, Bailin and Grafstein (2016) states that readability pertains to the extent to which written language is comprehensible or challenging to comprehend. There is typically an inverse link between lexical density and readability. Texts exhibiting greater lexical density are generally more intricate and hence possess less readability. A rise in content words frequently coincides with longer and more intricate sentences, which may present understanding difficulties for readers, particularly those with restricted vocabulary or language skills. In contrast, writings with reduced lexical density, with a greater proportion of function words, are generally simpler and exhibit elevated readability scores. Nonetheless, it is crucial to acknowledge that although lexical density can affect readability, it is not the exclusive factor. Readability is affected by multiple

factors, including (a) the average sentence length, (b) the amount of unfamiliar vocabulary, and (c) the grammatical complexity of the language used (Siregar et al., 2024).

Definition and Importance of Lexical Density and Readability in Language Education

Lexical density assesses the proportion of content words in a text and is often associated with the complexity and profundity of the text's subject matter (Amer, 2021; Clavel-Arroitia & Pennock-Speck, 2021). Convesrsely, readability refers to the reader's capacity to comprehend the text and is typically assessed using indexes like the Flesch Reading Ease scale (B. Amer & Baarah, 2021). Rizkiani et al. (2022) assert that these two factors are crucial for aligning instructional materials with students' comprehension levels, which is essential for effective language instruction, particularly for English as a Foreign Language (EFL) learners. Lexical density and readability are essential in the creation of EFL educational materials. Lexical density assesses the intricacy of information inside the text, whereas readability gauges the simplicity of comprehension of the text. Both promote the alignment of information with students' understanding, hence boosting the effectiveness of language acquisition.

The Influence of Lexical Density on Students' Writing Skills

Lexical density affects the complexity of information in a text, and high levels may impede students, especially in their writing skills. Conversely, readability guarantees that the text is comprehensible. Research indicates that harmonizing lexical density in instructional materials and students' writing can significantly enhance their comprehension and writing abilities. Numerous research investigate readability and lexical density in instructional materials, although an increasing number are emphasizing the significance of lexical density in students' writing abilities, particularly within EFL and ESL contexts. Maamuujav (2021) discovered that L2 students frequently encounter difficulties when tasked with composing lexically intricate essays. Putri et al. (2024) demonstrate that elevated lexical density in the compositions of IELTS Band 4 students is associated with writing complexity, underscoring the necessity of balancing lexical density to achieve clarity in writing.

The Role of Readability in English as a Foreign Language Education

Readability has emerged as a crucial element in language instruction, particularly for EFL students who often struggle with excessively intricate texts. Nkhobo and Chaka (2023) employed the Coh-Metrix tool to assess the readability of student essays, discovering that diminished readability scores correlate directly with increased syntactic complexity, hence impeding understanding. Rizkiani et al. (2022) demonstrate that texts with low readability ratings frequently necessitate customized instructional strategies to address students' requirements.

Differences in Context and Student Profiles on Lexical Density and Readability

Numerous studies indicate that students' linguistic and cultural origins can influence the readability and lexical density of their writings. Clavel-Arroitia and Pennock-Speck (2021) discovered that Japanese and Spanish pupils exhibit distinct patterns of lexical usage in both written and oral communication, indicative of their divergent linguistic requirements. Choemue and Bram (2021) identified disparities in word usage between EFL and ESL writers in ASEAN nations, suggesting that variations in linguistic origins can influence the capacity to comsprehend and compose intricate works.

Increased Lexical Density in Academic Texts and Its Implications for Education

Numerous studies indicate a rising tendency in lexical density within academic texts over time, particularly in fields that emphasize lexical expertise (Zhu et al., 2023). This affects English language instruction, necessitating that students acquire the ability to read and write academically dense literature. Amer and Baarah (2021) propose that excessively elevated lexical density should be calibrated to the appropriate learning level to prevent a decline in students' willingness to learn.

Implications of Lexical Density and Readability for Language Learning in Indonesia

Research conducted by Rizkiani et al. (2022) and Fadhil et al. (2023) reveals that EFL textbooks in Indonesia typically exhibit elevated lexical density, which may not correspond with the competencies of students at the designated level. This study emphasizes the significance of evaluating suitable lexical density and advocates for the utilization of analytical instruments to assist educators in assessing the readability and density of instructional texts.

1   Methodology

1.1   Research Design

This study employed a descriptive qualitative research methodology to assess the lexical density and readability of English essays written by high school students who have recently completed a one-month English course. This paradigm, akin to methodologies employed in EFL research by Yang et al. (2023), creates a basis for analyzing the relationship between lexical attributes and writing quality at an intermediate level.

1.2   Participants

The participants consist of ten high school students who have recently completed a one-month English course. A group of students was chosen to represent novice EFL learners, allowing the study to investigate the impact of limited English experience on the lexical and readability characteristics of their writing.

1.3   Data Collection

The data collection will comprise ten student essays, each ranging from 150 to 200 words in length. The length of this text enables a comprehensive and manageable analysis of both lexical density and readability, akin to methods employed in lexical examinations of learner writing samples (Ramadhani et al., 2023).

1.4   Data Analysis

3.4.1   Lexical Density

The calculation of lexical density will determine the ratio of content words inside each text. Instruments such as the Lexical Complexity Analyzer and techniques from Maufiroh et al. (2024) will be utilized to deliver quantitative assessments of lexical richness.

3.4.2   Readability

Readability scores will be calculated utilizing the Flesch Reading Ease methodology. This measure facilitates the evaluation of comprehension ease according to the methodology proposed by Arshad et al. (2023) offering insights into the readability levels of intermediate EFL writing.

$$RE = 206,835 - (1,015 \text{ X ASL}) - (84,6 \text{ X}$$

Source: (Sinar, 2023)

Table 1. Flesch Reading Ease Scale

Reading Ease Score	Description	Reading Grade

0-29	Very Difficult	College Graduate
30-49	Difficult	13 - 16 grade
50-59	Fairly Difficult	10 - 12 grade
60-69	Standard	8 - 9 grade
70-79	Fairly Easy	7 grade
80-89	Easy	6 grade
90-100	Very Easy	5 grade

3.5 Interpretation

The results will analyze the correlation among lexical density, readability, and writing quality. Research conducted by Sabuna et al. (2024) on the lexical density of reading materials indicates that intermediate EFL learners gain from texts with a balanced density for comprehension, which is likely to align with findings in student essays. The study will also examine if high lexical density is associated with reduced readability, as proposed by Fadhil et al. (2023) in their examination of EFL textbooks.

4. Result and Discussion

Result

Lexical density refers to the proportion of content words (nouns, verbs, adjectives, and adverbs) to function words (pronouns, conjunctions, prepositions, etc.) within a text. It quantifies the proportion of a text that comprises substantive content in relation to grammatical or structural components (Halliday & Matthiessen, 2013). The subsequent table presents the lexical density findings of ten writing assessments conducted by ten students who have participated in an English class for one month, as assessed by "Analyze My Writing."

The table displays lexical density and the distribution of word categories (nouns, adjectives, verbs, and adverbs) among ten distinct texts, each with differing total word counts. The lexical density of these texts varies from around 48.54% to 56.07%, aligning with the range commonly linked to moderately complex texts. This topic examines trends and potential implications regarding text complexity and readability within an educational framework, particularly for secondary education students or language learners.

4.1 Lexical Density

No	Noun	Adjective	Verb	Adverb	Total Words	Lexical Density
1	27.85%	10.05%	10.5%	4.57%	219	52.97%
2	25.13%	9.74%	13.33%	4.62%	195	52.82%
3	24.48%	8.71%	14.94%	2.49%	240	50.62%
4	21.36%	11.65%	11.17%	4.37%	206	48.54%
5	24.17%	15%	14.17%	2.5%	120	55.83%
6	18,62%	12,41%	15,86%	5,52%	145	52,41%
7	21,43%	7,14%	16,43%	4,29%	140	49,29%
8	20%	8,24%	17,65%	5,88%	84	51,76%
9	22,54%	11,56%	15,61%	6,36%	172	56,07%
10	25%	7,50%	16,25%	2,50%	240	51,25%

The analysis indicated that nouns were the most frequent parts of speech in the 10 texts, surpassing verbs, adverbs, and adjectives in terms of quantity. Most of these nouns were part of noun phrases, representing individuals, locations, or entities, and were often accompanied by additional information. This pattern aligns with the findings of Amer & Baarah (2021), who noted that Jordanian textbooks also featured a high percentage of nouns. While this increased lexical density, it made the texts more challenging for lower-proficiency learners.

Lexical density measures the proportion of content words (nouns, verbs, adverbs, and adjectives) relative to the total word count of a document. A higher lexical density indicates a greater concentration of content words, often associated with increased informational richness and complexity. In the submitted data, lexical density levels typically range from 48% to 56%. Texts with over 50% lexical density, such as Texts 5, 8, and 9, show substantial density, reflecting a higher level of linguistic complexity. Putri et al. (2024) also highlighted that texts with higher lexical density often require more cognitive effort from learners, which aligns with the finding that such texts can complicate comprehension for language learners. For example, Text 9, with a lexical density of 56.07%, contains a significant proportion of nouns, adjectives, and verbs, which may increase the difficulty of comprehension due to its dense information.

The distribution of word categories in the examined texts demonstrates varied patterns, each influencing lexical density and readability in different manners. Nouns constitute the most prevalent content terms, with frequencies varying from 18.62% to 27.85%. Texts with elevated noun percentages, such as Text 1 (27.85%) and Text 10 (25%), demonstrate enhanced lexical density. This indicates that a robust noun presence enhances information richness, delivering such texts appropriate for descriptive or informational objectives. Nevertheless, for learners who may find high information loads difficult, literature rich in nouns can provide challenges due to the necessity of processing complex information.

Adjectives appear with frequencies ranging from 7.14% to 15%. Text 5, which had the highest percentage of adjectives (15%), also exhibited one of the highest lexical densities (55.83%). This pattern aligns with the findings of Zhu et al. (2023), who observed an increase in lexical sophistication, including the use of adjectives, in academic texts over time. These results suggest that lexical sophistication plays a significant role in enhancing text complexity and richness. The use of adjectives, in particular, contributes to descriptive complexity, which can enhance vocabulary acquisition and descriptive abilities. However, the additional detail provided by adjectives may increase cognitive demands, requiring support for learners to fully comprehend these texts. Verbs, which ranged from 10.5% to 17.65%, add a distinct depth to the texts. Texts with higher verb usage, such as Texts 8 and 10 (both exceeding 16%), highlight events or processes, giving the content a dynamic quality. While this can make the texts more engaging, the action-oriented nature of these texts may pose challenges for less proficient readers who must follow the sequence of activities or events.

Adverbs, which are used infrequently (ranging from 2.49% to 6.36%), were more common in texts with higher lexical density, such as Texts 8 and 9. However, as Nkhobo & Chaka (2023) found, excessive use of complex sentence structures, including adverbial clauses, can reduce overall readability. This highlights the importance of carefully balancing lexical elements to maintain both density and comprehension. The findings have practical implications for selecting instructional resources. Texts with high lexical density, such as Texts 5, 8, and 9, may be more appropriate for intermediate or advanced learners. As Rizkiani et al. (2022) suggest, providing glossaries or guided activities can assist students in navigating these dense texts effectively.

Adverbs enhance the nuance of action descriptions; nevertheless, their overuse can convolute sentence structure and impede readability. A balanced distribution of word categories seems to sustain a modest lexical density, as evidenced in Texts 2 and 7. Conversely, texts exhibiting increased percentages of nouns or adjectives, such as Texts 1, 5, and 9, reveal larger lexical density, indicating enhanced content richness. This variation suggests that various combinations of nouns, adjectives, verbs, and adverbs can influence readability and text suitability according to learner levels. Texts abundant in nouns and adjectives are more detailed and

may be appropriate for advanced learners. Conversely, texts that emphasize verbs and adverbs are more action-driven and can be captivating, yet necessitate supplementary comprehension assistance for less proficient readers.

The results have practical implications for the selection of instructional resources. Texts exhibiting a lexical density over 50% tend to be more intricate, rendering them appropriate for intermediate or advanced learners capable of managing the heightened informational burden. Students, however, may gain from texts exhibiting reduced lexical density (below 50%) and more straightforward structures. A balanced content strategy - characterized by reasonable utilization of nouns, adjectives, verbs, and adverbs - facilitates comprehension by providing variety without covering learners. Ultimately, for texts with high lexical density, instructional aids such as glossaries, guided inquiries, or scaffolding activities can assist learners in comprehending intricate information and facilitate vocabulary enhancement. These approaches customize instructional resources to align with students' skill levels, hence improving the learning experience.

4.2 Readability

No	Total Words	Total Sentence	Total Syllables	ASL	ASW	Readability Score	Description of Style
1	219	23	253	9,66	97,73	99,4	Very Easy
2	195	14	262	14,13	113,66	79	Fairly Easy
3	240	15	301	16,24	106,1	84,4	Easy
4	206	18	257	11,61	105,54	89,7	Easy
5	120	12	151	10,15	106,45	90,2	Very Easy
6	145	7	175	21,02	102,10	83,7	Easy
7	140	10	181	14,21	109,37	83,2	Easy
8	84	8	104	10,65	104,74	91,4	Very Easy
9	172	12	213	14,54	104,76	87,5	Easy
10	240	9	307	27,06	108,21	71,5	Very Easy

The readability analysis of the ten texts shows differences in reading difficulty, as indicated by measures such as Average Sentence Length (ASL), Average Syllables per Word (ASW), and the overall Readability Score. These metrics provide valuable insights into the comprehensibility of each text, which is important for selecting appropriate resources for learners at different skill levels. This aligns with the findings of Amer & Baarah (2021), who noted that readability scores are often linked to the structural simplicity or complexity of the material. Texts categorized as "Very Easy," such as Texts 1, 5, and 8, are well-suited for lower-proficiency learners due to their simpler structures and vocabulary, which facilitate comprehension. In contrast, texts classified as "Easy," such as Texts 3, 4, and 7, offer moderate complexity, making them appropriate for students advancing toward intermediate proficiency. These results support Maamuujav (2021), who observed that texts with lower readability scores tend to hinder comprehension, particularly for less proficient readers.

Discussion

The readability scores of these texts range from 71.5 to 99.4, indicating their structural and lexical simplicity. Text 1 possesses an ASL of 9.66 and an ASW of 97.73, both of which enhance its elevated reading score of 99.4. Text 10, characterized by an average sentence length of 27.06, has a remarkable readability score of 71.5 according to its comparatively uncomplicated vocabulary. The "Very Easy" classification indicates that these texts are suitable for lower-proficiency learners or individuals requiring less cognitive effort to comprehend the content.

The predominant texts are categorized as "Easy," with ratings ranging from 83.2 to 89.7. Texts 3, 4, 6, 7, and 9 exhibit intermediate ASL and ASW values, ensuring a manageable reading level while integrating a degree of complexity. Text 3 possesses an ASL of 16.24 and an ASW of 106.1, yielding a readability score of 84.4. This suggests that the content is clear yet employs longer sentences and more sophisticated vocabulary, rendering it suitable for learners who are proficient in fundamental sentence patterns but may not be prepared for advanced materials.

Only Text 2 is categorized as "Fairly Easy," possessing a readability score of 79. It possesses a notably elevated ASW of 113.66 and an ASL of 14.13, which result in a marginally reduced readability score in comparison to other texts. This indicates that Text 2 contains more sophisticated vocabulary or marginally more intricate sentence constructions. This text, while still accessible, may be better appropriate for learners advancing toward intermediate-level reading proficiency.

The readability analysis reveals that the majority of texts are classified as "Very Easy" or "Easy," rendering them appropriate for learners across different levels, from beginners to lower-intermediate. The "Very Easy" texts are particularly suitable for learners who require straightforward language and structure, whilst the "Easy" texts offer a moderate escalation in complexity, facilitating vocabulary enhancement and comprehension abilities. Text 2, categorized as "Fairly Easy," is suitable for learners progressing to more challenging reading levels. The findings underscore the necessity of choosing texts with suitable reading levels that align with learners' language proficiency, so ensuring that materials are both accessible and advantageous for language acquisition.

The findings highlight the importance of selecting texts with appropriate readability levels that align with learners' language proficiency. As Putri et al. (2024) emphasize, balancing lexical density and readability is crucial to support language acquisition while ensuring materials are both accessible and sufficiently challenging. This balance not only improves the learning experience but also promotes effective vocabulary development. Lexical density and readability offer valuable insights into the complexity and accessibility of student-generated texts in English language learning. The analyzed texts exhibited lexical densities ranging from 48.54% to 56.07%, indicating a moderately complex level of informational richness. Texts with higher lexical density, such as Texts 5, 8, and 9, were characterized by a higher frequency of nouns and adjectives, consistent with the findings of Amer & Baarah (2021) and Rizkiani et al. (2022). These studies suggested that noun-rich texts enhance descriptive capabilities but may challenge learners who lack adequate support.

Moreover, this study reaffirms the significance of balancing lexical density and readability in developing effective instructional materials. As noted by Putri et al. (2024), overly dense texts can overwhelm learners, while those with low lexical density may not provide enough challenge. The findings align with the consensus in previous research that a balanced approach—featuring moderate lexical density and an appropriate readability level—enhances both vocabulary acquisition and comprehension. Future studies could expand on these findings by examining the impact of these factors in different cultural and linguistic contexts, thereby deepening our understanding of text complexity and its role in language education.

5. Conclusion

The preceding discussion indicates that lexical density and readability are critical elements affecting the appropriateness of texts for language learners, particularly in an EFL context. Texts exhibiting high lexical density, typically exceeding 50%, are replete with content words, hence offering enhanced informational depth, rendering them appropriate for intermediate or advanced learners capable of processing complicated material. For learners with lower competence levels, texts characterized by reduced lexical density are more accessible due to their fewer content words and diminished cognitive burden.

Texts classified as "Very Easy" or "Easy" are suitable for novice and lower-intermediate learners due to their simple language and structure, facilitating comprehension. Only a single text is classified as "Fairly Easy," indicating a shift towards more demanding materials for learners enhancing their skill.

The results suggest that educational resources must be meticulously selected to correspond with learners' proficiency levels. In texts with more density, instructional aids like glossaries or guided questions can improve understanding. A comprehensive content strategy that incorporates a diverse array of nouns, adjectives, verbs, and adverbs enhances text clarity and aids vocabulary development, hence improving the learning experience.

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