# Examining lexical density of Bahasa Indonesia for foreign language learners (BIPA) textbook

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**Abstract**
Lexical density is often overlooked by authors of textbooks for foreign learners of the Indonesian language. However, the level of lexical density significantly influences the accessibility of reading materials for their intended audience. As developers of language teaching materials, particularly for the Indonesian language, lexical density must be considered to ensure the appropriateness of instructional materials at the appropriate level. Taking this issue into account, this study aims to evaluate the extent of lexical density in the instructional materials designed for teaching Indonesian to foreign learners, developed by the APPBIPA Central Sulawesi, at the BIPA 1 level or equivalent to CEFR level A1. To address this question, descriptive research with content analysis was conducted by analyzing the reading texts found in the textbook using the lexical density formula developed by Ure, and identifying the content word classes and their functions. Among the ten units analyzed, there were 36 reading texts that indicated that the ongoing development of this book still maintains a high level of lexical density, reaching 64.13%. This high lexical density is attributed to the differences in linguistic systems and the content of the instructional materials, which generally have a density in the range of 50-60%. This research shows that Indonesian language textbooks for non-native speakers still have high lexical density for beginner levels. Therefore, adjustments are needed based on the level and learning goals of the current BIPA curriculum.

## INTRODUCTION

Developing instructional content for non-native Indonesian speakers poses a formidable challenge, given the intricate nature of the language, a primary factor influencing learners' proficiency in comprehending and mastering it effectively. Regrettably, hitherto, creators of teaching resources have not given meticulous attention to how instructions, exercises, and discourse should be meticulously structured within a teaching text. An instructional manual must align with the learning objectives and the proficiency level of the learners. Consequently, the complexity of literacy is a major concern in education, particularly within language instruction, as literacy is essential for learning in every academic field and higher education setting. (To et al., 2013; Pinto et al., 2020).

In developing Indonesian language teaching materials for foreign learners, authors must take into account lexical density and readability. Both these components play a pivotal role in determining the extent to which a reading can be accessible and comprehensible by readers at a particular level of comprehension (Castello, 2008; Sari, 2016). Given the disparities in language systems between

Indonesian and foreign languages, foreign learners may grapple with challenges when it comes to adapting to the Indonesian language's spelling and pronunciation system.

As such, textbooks tailored for foreign learners necessitate a distinct approach compared to those intended for native Indonesian speakers. At the introductory level (BIPA 1), textbooks should employ texts that are congruent with the learning objectives and straightforward language, recognizing that learners are still in the process of acclimatizing themselves to the Indonesian language. The utilization of uncomplicated language or 'simple code' can also facilitate foreign learners in comprehending the instructions embedded in exercises (Krashen, 2002). By harnessing simple code, learners can derive maximum benefit from the material they study in accordance with their language proficiency.

According to Fajardo et al. (2014), well-structured texts with good readability levels play a significant role in enabling learners to understand texts more effectively. This is evident in their ability to provide relevant answers to questions related to the text. The higher the information density in a text, the more challenging it can be for learners, especially in the early stages of learning. Adaptation in developing instructional materials is an essential step for instructors and advocates of the Indonesian language for foreign speakers, as the content and teaching materials delivered must align with the characteristics of the intended audience (Zamanian & Heydari, 2012). For instance, at the BIPA 1 level, it is recommended that Indonesian language learners for foreign speakers are not introduced to texts with more than a hundred words. Furthermore, material designers should also understand that at the initial stage of learning, learners should not be exposed to content containing complex vocabulary and affixes, as it can impact their ability to comprehend texts in Indonesian. Additionally, the selection and filtering of content, as well as the inclusion of local content reflecting Indonesian cultural distinctiveness, are also crucial in the process of curriculum development. This is because instructional materials not only transmit grammatical knowledge but also introduce the richness of national culture.

Teaching Indonesian as a Foreign Language (BIPA/TIFL) presents unique challenges that set it apart from the instruction of other foreign languages. The primary factor influencing the complexity of BIPA is the diversity of regional languages in Indonesia. According to Aziz (2023), there are up to 718 regional languages with distinct linguistic characteristics spoken across different regions. This poses a significant challenge for BIPA educators, as foreign language learners not only need to understand the Indonesian language itself but also grasp the context of Indonesian culture to avoid cultural astonishments or culture shock.

It is important to note that dialectal differences extend beyond phonological aspects and also encompass differences in vocabulary. According to Kementerian Pendidikan dan Kebudayaan (2018), if these differences reach 51-80%, it can be considered that these languages belong to different dialect groups. Therefore, BIPA instructors must take these differences into account when designing learning materials. In addition to linguistic differences, the learning objectives of Indonesian language instruction distinguish it from other foreign language instruction. Suyitno (2007) emphasizes that learning Indonesian is not only about mastering the language itself but also about understanding and appreciating the richness of Indonesian culture. Therefore, the goals of BIPA instruction focus on two main aspects: language proficiency and cultural understanding.

However, there are further challenges in BIPA instruction. Solikhah and Budiharso (2020) observed that there are currently no clear standards for creating BIPA materials based on the needs of learners. They found that available teaching materials and textbooks often do not align with the learners' comprehension levels. Textbooks that are too densely packed with various topics make it difficult for students to digest the material effectively. Therefore, a thorough needs analysis and appropriate placement are necessary before providing instructional materials to learners.

Furthermore, research also indicates that some vocabulary taught may not always be relevant to its use in everyday contexts and may not always be arranged based on the complexity level of the words. This hinders learners' natural development in listening and speaking skills. Tailored readings for advanced learners can also challenge them to comprehend and apply the grammar they access.

In addressing these challenges, there is a need to develop BIPA materials that better suit the needs and comprehension levels of learners. A comprehensive analysis of lexical density, vocabulary

relevance, and material placement in instructional books can be an essential initial step. Several previous researches have focused on lexical density in government-published books, particularly those related to the 2013 curriculum (Sari, 2016). Additionally, these books were aimed at learners of English as a foreign language (Sujatna et al., 2021; Marlin & Ashadi, 2019; Masyi'ah & Ciptaningrum, 2018). So far, there has been little research focusing on the lexical density of BIPA instructional books for foreign learners. Moreover, the treatment of BIPA learners and their textbooks follows different rules.

Based on these considerations, this study aims to analyze the lexical density of the prototype Indonesian Language Teaching Materials for Foreign Learners (BIPA) developed by advocates and instructors of Indonesian for foreign speakers in Central Sulawesi. Additionally, this study aims to assess whether the text has lexical density levels appropriate for its reader's proficiency level using the Ure lexical density formula. This evaluation is conducted to provide relevant feedback and information for BIPA advocates in their efforts to create more optimal teaching materials. The implications and results of this study will be further discussed in the subsequent chapter.

**Lexical Density**

According to Halliday (1985), the concept of density refers to the complexity in the development of words in discourse. This is related to the lexicogrammatical aspect of a language that influences how a person comprehends a reading based on the vocabulary accessed in the text. In other words, the more diverse the vocabulary in a text, the higher its level of complexity (Amer, 2021). Lexical density is a measure of the density of a sentence or text, which calculates the ratio between content words and function words. The number of content words determines how information-dense a text is (Halliday & Matthiessen, 2004). When measuring lexical density, there are two types of words whose proportions are calculated: content word classes, which include nouns, verbs, adjectives, and adverbs, as well as function word classes, such as prepositions, pronouns, conjunctions, auxiliary verbs, determiners, and articles. According to Daller et al. (2003), lexical density or lexical richness refers to a statistical measurement term that measures the lexical richness of a text and is also used to assess a student's learning progress. They also emphasize that texts with low lexical density (not containing many types of word categories) tend to be easier to understand because dense sentences contain so much information that language learners must first digest (Gregory-Signes & Clavel-Arroitia, 2015).

In contrast to Halliday's approach, Ure (1971) measures lexical density not based on the phrase level but at the word level. For Ure, a lexical word is a word that carries a complete and independent meaning, while words that do not fall into the lexical class are purely functional grammatical markers. Words with a high-density proportion contain many content words, which can be interpreted as indicating that the text contains much information. Ure posits that when a text exhibits a lexical density below 50%, it is characterized by a low concentration of meaningful content, a characteristic commonly observed in spoken conversations. Conversely, texts found in educational materials or news articles tend to have a lexical density ranging between 50% and 70%. This is due to the fact that these forms of discourse are replete with information that necessitates efficient retrieval by the reader.

Drawing on the insights of these authorities, one can infer that the lexical density of a text is a pivotal factor in ascertaining its accessibility to readers, particularly in the context of instructional or informational materials. This metric serves as a gauge of how much substantive content is packed into the text, influencing the reader's ease of comprehension and retention. When it comes to textbooks designed for novice foreign language learners, it is anticipated that the text will exhibit a lower lexical density. This is predicated on the understanding that presenting overly intricate language input may pose a formidable challenge for beginners, especially those whose native language systems markedly differ from the target language. The concept of lexical density pertains to words that bear significant informational weight, as opposed to function word categories, which primarily serve grammatical roles. As the number of sentences in a text increases, so does the concentration of information encapsulated within it.

Within this framework, words such as nouns, verbs, adjectives, and adverbs are classified as content words. These words carry semantic meaning and play a pivotal role in conveying

information. Conversely, word classes like auxiliary verbs, pronouns, articles, and prepositions are categorized as grammatical or function words. Their primary function is to facilitate the structure and coherence of a sentence rather than carry substantial informational content.

When crafting textbooks tailored for novice foreign language learners, it becomes imperative to ensure that the material presented aligns with their proficiency level. The content should adhere to criteria encompassing appropriateness in terms of subject matter, linguistic complexity, presentation style, and visual design. Placing a strong emphasis on linguistic clarity is paramount to guarantee comprehension among language learners. Furthermore, an influential textbook should possess the capacity to inspire and nurture the creativity of learners, thus fostering an environment conducive to language acquisition. The layout and design of the book also wield significant influence in aiding learners' grasp of the content (Kurniawan et al., 2022).

In the realm of teaching Indonesian as a second language, where Indonesian is regarded as a foreign language, considerations regarding content density and lexical richness emerge as pivotal elements in bolstering learning outcomes. As noted by Bukoye (2018), it is crucial to take into account communicative competence, which encompasses both linguistic and sociolinguistic dimensions. In the context of BIPA textbooks, integrating regional discourse texts holds significant importance, as one of the primary objectives in teaching BIPA is to introduce the cultural richness of Indonesia to foreign learners. However, this regional perspective must undergo judicious filtering to harmonize with the learning content and portray Indonesia as an affable and culturally diverse nation.

**RESEARCH METHOD**

In the current research endeavor, the investigator employs a method known as the lexical density test. This method involves quantifying the ratio between the number of lexical elements (or words with specific meaning) and the overall word count within a given discourse. The assessment of lexical density serves as a valuable tool in assessing whether the content found in the book exhibits a higher or lower proportion of lexical elements (Laufer, 2005). A higher proportion implies that the text is rich in specific vocabulary, which can significantly influence the comprehension of the text in a foreign language for both readers and language learners alike.

Within the scope of this study, an instructional manual prototype, developed by dedicated Indonesian language educators and language advocates, is subjected to rigorous analysis. This examination encompasses a comprehensive content analysis, supplemented by the application of a formula refined and perfected by Ure (1971). Through the amalgamation of these analytical approaches, the research aims to provide a nuanced and insightful evaluation of the prototype's linguistic attributes, ultimately contributing to a deeper understanding of its pedagogical potential for foreign language learners.

**Data**

The gathered data originates from a prototype instructional book developed by the Association of Indonesian Language Instructors and Advocates for Foreign Speakers (APPBIPA) in Central Sulawesi. The book's development process involved various education and linguistic practitioners from universities in Central Sulawesi. Each chapter was crafted by a team consisting of two members, responsible for both content compilation and layout design. Subsequently, the assembled material underwent a thorough review by a verification team composed of three members. This instructional book comprises ten module chapters intended for teaching Indonesian to foreign speakers at the BIPA 1 level, equivalent to CEFR level A1. The criteria for the collected data encompass text structured in the form of discourse, dialogue, and description. The researcher refrained from including linguistically unstructured or seemingly random data, as measuring lexical density necessitates intact grammatically-structured text (Rizkiani et al., 2022).

**Data Collection & Analysis**
The process of data collection involved documenting relevant information, which was subsequently organized based on specific criteria. These criteria focused on identifying and extracting instructional sentences as well as textual content from the teaching materials. This methodical approach ensured that the data selected for analysis met the predefined requirements, namely consisting of sentences containing instructions, narrative texts, and descriptive texts.

To gain deeper insights into the linguistic characteristics of the instructional material, a crucial step was taken to evaluate its lexical density. This involved a meticulous calculation that entailed counting the number of lexical elements present and then dividing this figure by the total word count in the text. This quantitative measure provided a clear indication of the concentration of meaningful words and phrases within the material.

In order to make a meaningful assessment of the instructional material's suitability for beginner-level language learners, each unit's lexical density was rigorously compared. This analysis allowed for a comprehensive evaluation of whether the discourse text within the teaching material was well-suited for individuals at the introductory stages of language learning. This thorough examination aimed to ensure that the material provided an appropriate level of linguistic complexity and comprehensibility for the target audience.

Ure's Lexical Density formula stands as a valuable tool in the realm of text analysis. It provides a structured approach to gauging the presence of words with distinct and specific meanings within a given text. This formula places particular emphasis on lexical words, encompassing nouns, verbs, adjectives, and adverbs, which form the core components of a text's semantic content.

$$Lexical\ Density = \frac{Total\ Lexical\ Item}{Total\ Words\ in\ Text}\ x100$$

The resultant numerical value obtained through the application of this formula serves as a crucial indicator of the text's readability and comprehensibility for readers. A higher score suggests that the text is likely to be more accessible and easily understood, while a lower score signals a greater level of complexity and challenge in grasping the content (Ure, 1971b).

By utilizing Lexical Density formula, researchers gain a precise means to quantify the level of lexical intricacy inherent within a text. This insight allows for a clear understanding of whether the text is appropriately tailored for a specific target audience or language learners at a particular proficiency level. It serves as a foundational element in ensuring effective communication and comprehension in educational materials and linguistic analyses.

**FINDINGS AND DISCUSSION**
**Findings**
In this section, the observed results are carefully analyzed based on the presented lexical elements. The researcher meticulously categorizes word classes such as nouns, verbs, adjectives, and adverbs as part of the content word class. Next, the subsequent step involves breaking down the total content words in each discourse and dialogue by the total words in each dialogue. This is done to determine the level of lexical density.

The researcher conducted an analysis of ten units of the instructional book design for Indonesian Language for Foreign Speakers (BIPA) with dedicated input from experts and educators in BIPA from the Central Sulawesi APPBIPA. This design is specifically tailored for basic-level BIPA learners or BIPA 1, with the underlying belief that introduced words should remain at a foundational level. Additionally, the introduced grammar should not be overly complex or intricate to avoid confusing learners. It is recommended that each discourse not exceed 100 words and refrain from using affixes that have not been introduced at the BIPA 1 level. From the analysis, it was revealed that there are 36 text discourses and dialogues in the instructional book design, comprising a total of 1684 words.

**Table 1. The Disparity in Word Count Found in the BIPA 1 Textbook**

| No. | Chapter | Number of Texts | Total Words in Passage |
|---|---|---|---|
| 1 | Unit 1 - Salam | 4 | 99 |
| 2 | Unit 2 - Perkenalan | 3 | 156 |
| 3 | Unit 3 - Keluargaku | 4 | 176 |
| 4 | Unit 4 - Hobi | 4 | 219 |
| 5 | Unit 5 – Kegiatan di rumah | 4 | 237 |
| 6 | Unit 6 - Transportasi | 3 | 97 |
| 7 | Unit 7 – Arah Letak Lokasi | 5 | 253 |
| 8 | Unit 8 – Berapa Harganya? | 3 | 136 |
| 9 | Unit 9 – Ayo Belanja Oleh-oleh | 3 | 127 |
| 10 | Unit 10 – Aktivitas di Luar Rumah | 4 | 184 |
| | Total | 36 | 1684 |

The data presented above clearly illustrates that Unit 6 contains the smallest number of words, specifically 97, derived from three discourse texts. In contrast, Unit 7 boasts a higher word count, totaling 253, encompassing both discourse texts and dialogues. This discrepancy highlights a notable disparity in text length between the two units, with Unit 7 offering a substantially more extensive body of content compared to Unit 6. This increase in word count in Unit 7 provides ample room for a more thorough exploration of the subject matter or the provision of more intricate and detailed information. This variation in text length across units indicates a deliberate design choice, potentially reflecting the instructional objectives and the complexity of the material being covered. While Unit 6's concise nature may suggest a more focused or introductory approach, Unit 7's extended content allows for a deeper dive into the subject matter, potentially facilitating a more comprehensive understanding for learners. This strategic allocation of content length in the instructional material demonstrates a thoughtful consideration of pedagogical effectiveness.

**Table 2. The Result of Ure's Lexical Density Test**

| No. | Chapter | Number of Text | Content Words | Total Words in Passages | Lexical Density |
|---|---|---|---|---|---|
| 1 | Unit 1 | 4 | 53 | 99 | 53.53% |
| 2 | Unit 2 | 3 | 79 | 156 | 50.64% |
| 3 | Unit 3 | 4 | 101 | 176 | 57.38% |
| 4 | Unit 4 | 4 | 142 | 219 | 64.84% |
| 5 | Unit 5 | 4 | 163 | 237 | 68.77% |
| 6 | Unit 6 | 3 | 67 | 97 | 69.07% |
| 7 | Unit 7 | 5 | 155 | 253 | 61.26% |
| 8 | Unit 8 | 3 | 109 | 136 | 80.14% |
| 9 | Unit 9 | 3 | 88 | 127 | 69.29% |
| 10 | Unit 10 | 4 | 123 | 184 | 66.84% |

The table above provides a snapshot of the lexical density measurements conducted using the Ure method. Lexical density is determined by comparing the total number of words falling under the categories of nouns, verbs, adjectives, and adverbs to the overall word count within a given discourse. The data derived from the analysis of the instructional book design for Indonesian Language for Foreign Speakers (BIPA) indicates that Unit 2 exhibits the lowest lexical density compared to all other units, while Unit 8 demonstrates a notably high lexical density.

Unit 2 showcases sentences structured in a straightforward manner, without involving a wide range of lexical variations. This intentional design choice aims to facilitate accessibility for basic-level learners to the reading material. Conversely, Unit 8 exhibits high lexical density due to the inclusion of a substantial amount of information and content word classes within its reading text.

Furthermore, Unit 7 presents a total of 253 words, with 155 of them falling into the category of content words, resulting in a lexical density of approximately 61.26%. This signifies a substantial concentration of meaningful vocabulary within the text, indicating a rich linguistic content in Unit 7.

**Table 3. Lexical Density level**

| No. | Chapter | Lexical Density | Percentage |
|---|---|---|---|
| 1 | Unit 1 | 53.53% | Moderate |
| 2 | Unit 2 | 50.64% | Moderate |
| 3 | Unit 3 | 57.38% | Moderate |
| 4 | Unit 4 | 64.84% | High |
| 5 | Unit 5 | 68.77% | High |
| 6 | Unit 6 | 69.07% | High |
| 7 | Unit 7 | 61.26% | High |
| 8 | Unit 8 | 80.14% | Very High |
| 9 | Unit 9 | 69.29% | High |
| 10 | Unit 10 | 66.84% | High |

The research findings, when viewed through the lens of Ure's (1971) framework on lexical density levels, indicate that a significant portion of the instructional units exhibit a notably high degree of lexical density. This phenomenon can be attributed to the deliberate emphasis placed by the developers on the integration of content words, prioritizing them over function words during the instructional material creation process. This strategic decision aligns with the fundamental needs of novice learners, facilitating their comprehension and adaptation to the phonological and grammatical intricacies of the Indonesian language.

Nevertheless, it is imperative to recognize that learners at the BIPA 1 level also necessitate supplementary information concerning cultural nuances and practical language usage. Hence, in the construction of instructional materials, creators should consider a more balanced approach to lexical density. This means finding a middle ground, especially since learners at this foundational level may benefit from a slightly less dense linguistic structure. Such an approach will enhance their accessibility and comprehension of the learning materials.

This nuanced consideration ensures that learners not only gain proficiency in the linguistic aspects of the language but also acquire a deeper understanding of its cultural context. By striking this delicate balance, instructional materials can effectively cater to the diverse needs of learners, ultimately contributing to a more comprehensive and effective language learning experience.

**Table 4. Overall Lexical Density of BIPA 1 Textbook**

| Content Words | Total Words | Lexical Density | Category |
|---|---|---|---|
| 1080 | 1684 | 64.13% | High Density |

The BIPA 1 learning materials, curated by dedicated language instructors and advocates for foreign speakers of Indonesian, are generally characterized by a high lexical density. This means that a significant proportion of the content consists of meaningful words, which can potentially impact the ease of comprehension for learners. It's worth noting that these instructional materials differ in nature from more casual prose or entertainment-oriented texts. Academic materials typically contain a diverse range of information, resulting in an information density of approximately 50-60%.

This observation points to two important considerations. Firstly, the materials, although thoughtfully designed by BIPA practitioners and instructors, currently maintain a lexical density of 64.13%. Ideally, this should be fine-tuned to align with the comprehension level of BIPA 1 learners, who are at an introductory stage in their language journey (equivalent to CEFR level A1). It's crucial to strike a balance, as an excessively dense lexical composition may pose challenges for learners in terms of retention. Furthermore, the nature of the Indonesian language, being agglutinative, entails the sequential addition of words and grammatical morphemes to construct phrases or sentences.

This characteristic contributes to the linguistic richness and, in turn, may influence the higher lexical density measurements according to Ure's assessment.

In summary, the analysis underscores that the instructional materials created by BIPA instructors and advocates in Central Sulawesi predominantly exhibit a high level of lexical density. Among the ten units evaluated, three units demonstrate a moderate level, six units exhibit a high level, and one unit falls into the category of very high density. Consequently, it is recommended to conduct a thorough review of the textual content included in these materials to better align with the comprehension level of beginners. This fine-tuning will undoubtedly enhance the effectiveness of the instructional materials in facilitating language learning. This approach will not only bolster comprehension but also foster a more conducive learning environment for BIPA 1 students.

**Discussion**

In this section, we will delve into the research findings in conjunction with pertinent studies to delve deeper into the interconnectedness of related theories. This endeavor aims to provide a more comprehensive understanding of how the research outcomes contribute to the broader theoretical landscape. As previously discussed, it has been emphasized that the grammatical features of the Indonesian language play a significant role in shaping the measurement of lexical density. This phenomenon arises from the agglutinative nature of Indonesian, setting it apart from English, which employs a range of morphological markers integrated within its linguistic framework.

This research found that Indonesian as a Foreign Language (BIPA) textbooks still possess high lexical density, which may be challenging for beginner learners. According to the study conducted by Putra and Lukmana (2017), lexical density and variation should have a consistent progression that is tailored to the learners' proficiency levels and their learning development over time. This suggests that the materials used in BIPA textbooks need to be adjusted to ensure they match the capabilities and needs of the learners at different stages of their learning journey (Mulyanti & Soeharto, 2020).

Furthermore, it has been duly noted that texts characterized by a high lexical density often pose a greater challenge for memorization compared to those with a lower lexical density (Perfetti, 1969). This observation holds substantial implications, particularly for novice learners who may encounter unfamiliar vocabulary. Additionally, it's important to highlight that the Indonesian language features a limited number of gender-specific pronouns and auxiliary verbs. This linguistic aspect contributes to the higher lexical density measurements derived from the application of the Ure formula.

Johansson (2008) posits that, as a general trend, texts exhibiting low lexical density tend to display a higher degree of lexical variation. This argument mirrors the findings of our research, where it was observed that texts characterized by high lexical density often incorporate fewer lexical variants. This strategic choice by instructional material creators serves to steer clear of using combinations of function word classes that could potentially perplex readers, especially those at the foundational level. The intricate grammar system and the heightened lexical density serve as markers indicating the text's advanced level (Syarif & Putri, 2018). For novice learners, this presents a hurdle in comprehending the text with ease. Hence, it is imperative to present learning materials with grammatical structures that are more straightforward and reduce lexical density to facilitate their understanding. This approach not only enriches their learning experience but also contributes significantly to their overall proficiency in the Indonesian language. By tailoring instructional materials to the linguistic needs of learners, we enhance their linguistic development and foster a more effective learning environment.

*Lexical density and meaningful input*

When approaching the instruction of Indonesian as a Foreign Language (BIPA), it is essential to acknowledge that learners often perceive Indonesian as their second or even third language. Given this perspective, Indonesian holds the status of a foreign language, necessitating a unique approach in the development of instructional materials. As instructional material developers, it is incumbent

upon us to carefully consider the attainable milestones for beginners and endeavor to create a learning experience that mirrors the natural acquisition of one's first language (Krashen, 2002b, p213).

Teaching Indonesian as a Foreign Language (BIPA) is a multifaceted process that demands a meticulous approach to ensure effective language comprehension and proficiency. Among the pivotal facets of language acquisition is lexical density, which entails the extent to which a text or learning resource encompasses a diverse and varied vocabulary repertoire. This characteristic of lexical density plays a pivotal role in maximizing the impact of "meaningful input."

For students to effectively grasp and internalize a language, they must be exposed to texts or learning materials that are tailored to their current level of comprehension. However, these materials should also present challenges that encourage further linguistic development. In essence, learning materials should skillfully intertwine both of these elements. It is imperative to recognize that lexical density transcends mere word count; it encompasses the diversity and representativeness of the introduced vocabulary. In the realm of BIPA, this implies the need for a diverse and representative presentation of Indonesian vocabulary to learners.

In this context, the selection or creation of learning materials emerges as a critical factor. These materials must be curated with precision to ensure they encompass an adequate lexicon that addresses the learners' needs. However, it is paramount to remember that an excessively high lexical density can inadvertently pose a learning hurdle and present a challenge (Maamuujav, 2021). If a text inundates learners with complex and unfamiliar vocabulary, it may lead to feelings of intimidation and hinder comprehension. Therefore, striking a delicate balance between vocabulary complexity and the students' comprehension level is imperative. Learning materials should not solely focus on vocabulary acquisition; they should also encapsulate the societal, cultural, and historical fabric of Indonesia. This holistic approach aids learners in comprehending the contextual nuances of everyday language usage in Indonesian society.

In the realm of BIPA instruction, instructors should be discerning in their choice or creation of materials, aiming for a judicious blend of adequate lexical density and the delivery of meaningful input. This integration can be achieved by incorporating relevant vocabulary within the students' everyday context and experiences. Furthermore, instructors can leverage communicative situations that facilitate natural language interaction.

However, a notable challenge in BIPA instruction lies in the absence of standardized guidelines for material creation. Oftentimes, available instructional materials and textbooks may not align seamlessly with the comprehension level of learners. Textbooks that inundate learners with a diverse array of topics can potentially hinder effective digestion of the material. Hence, conducting a thorough needs analysis and appropriate placement of instructional materials is paramount before they are provided to learners. This strategic approach ensures that learners are equipped with materials that are not only informative but also conducive to their current stage of language acquisition.

### *Lexical density, teaching material and teachers' instruction*
Numerous studies have underscored the effectiveness of enhancing vocabulary density in foreign language instruction, particularly in the case of English, by incorporating texts with a high lexical density. Texts rich in vocabulary have the potential not only to bolster students' writing proficiency, but also to leverage their productive grasp of vocabulary, ultimately resulting in higher-quality written compositions (Maamuujav, 2021b). In the context of writing, both lexical density and diversity play pivotal roles in fostering language proficiency for learners, whether it is their first or second language. This necessitates students' mastery of using diverse and non-repetitive vocabulary and language structures (Nasseri & Thompson, 2021).

However, in the context of teaching Indonesian to Foreign Speakers (BIPA), particularly within the scope of this research focusing on BIPA level 1, a different approach is warranted. Learners should be provided with input that aligns with their current language proficiency level. Teachers must take into consideration the native language characteristics of their learners, as the greater the disparity between their native language system and Indonesian, the higher the likelihood of encountering difficulties in comprehending Indonesian texts. To bridge this gap, teachers can

make adjustments in classroom instruction by aligning the input with the students' language proficiency, enabling them to derive meaningful input from each language exposure transmitted in the learning process. These tailored instructional strategies are encompassed by the term "teacher talk". "Teacher talk" refers to the communication phenomenon between teachers and students characterized by lower lexical density. This arises from the communication objective inherent in teacher talk, which is to facilitate language comprehension for students regarding the input provided by the teacher. According to a study conducted by Ismail et al. (2023), the measurement of lexical density in teacher talk in elementary school language classes hovers around 40%, while at the university level, it ranges around 30%. This finding is intriguing, particularly since the investigated elementary school is an international institution, whereas at the university level, there are students with diverse backgrounds and proficiencies, necessitating greater adaptability in the communication process.

Stromqvist et al. (2002) further emphasize that when compared to lexical density in the context of narrative texts, written language exhibits a significantly higher lexical density. This underscores the notion that teacher talk, specifically, adopts a simplified and easily comprehensible communication style to facilitate the language learning process for students.

In the process of crafting instructional materials, authors should present the content in an uncomplicated manner. This serves the purpose of aiding learners in acclimating to the spelling and phonological intricacies of the Indonesian language, which is characterized by a preponderance of syllables. During the initial stages of the BIPA level 1 curriculum, the primary objective is not to focus on grappling with complex readings, cultivating critical thinking skills, or dramatically expanding vocabulary. Rather, the foremost aim is to furnish learners with fundamental proficiency in utilizing Indonesian within the context of everyday conversations. This foundational approach is crucial for establishing a solid linguistic base for further language development.

**CONCLUSION**

After reviewing a prototype of an Indonesian language instructional book for non-native learners, it's clear that 7 out of 10 units have a high level of lexical density. The overall text in the book has a lexical density of 64.13%, which is considered high. This is due to the use of text rich in content words, reflecting the complex and agglutinative nature of the Indonesian language. These findings strongly suggest the need for a thorough review of the instructional book. They emphasize the importance of carefully developing teaching materials so that learners encounter language content suited to their level of understanding. Texts with low lexical density are easier for readers to digest, particularly for beginner learners of Indonesian as a foreign language. This research is crucial for stakeholders in the field of Indonesian language instruction for non-native learners. The results offer strong evidence that creators of language teaching resources should prioritize lexical density. The researchers also acknowledge the inherent limitations of this study, particularly in its examination of lexical diversity and readability factors. It is, therefore, strongly advised for future researchers to contemplate methodologies for evaluating how lexical diversity and readability parameters can be effectively gauged within the specific context of the Indonesian language. This will undoubtedly enrich the depth and breadth of research in this domain, ultimately benefiting language learners and educators alike.

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