

# **LEXICAL DENSITY OF ENGLISH READING TEXTS**

## **FOR SENIOR HIGH SCHOOL**

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### **ABSTRACT**

This study deals with the lexical density especially the lexical items of English reading texts in the textbook for senior high school. The objectives of the study are to find out the lexical density especially the lexical items which formed in the reading texts of Look Ahead textbook and the type of genre which has the highest lexical density of the reading texts. This study was conducted by descriptive method with qualitative approach. The data of this research were the English reading texts of Look Ahead textbook for senior high school grade twelve published by Erlangga. The result of the analysis showed that: (1) The lexical items that formed in narrative texts are noun and verb, explanation texts are noun and verb, discussion texts are noun and verb, and review texts are noun, adjective, and verb. This means that narrative, explanation, and discussion texts are formed by two lexical items, they are noun and verb while review texts are formed by 3 lexical items, they are noun, adjective, and verb. (2) The lexical density of explanation texts are 58,42% and 52,05%, review texts are 55,73% and 53,51%, narrative texts are 48,96% and 43,97%, and discussion texts are 47,79% and 42,57%. The highest lexical density of the reading texts is the explanation text with percentage 58,42%. This meant that explanation text is the most difficult text to be comprehended in the textbook. It is suggested that further textbook writers to concern with the lexical density of the reading texts so that the textbook can be used and understood by the teacher and the students.

**Key words** : *Lexical Density, English Reading Texts*

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## **Introduction**

### *Background of the study*

Textbook is a key component of most subjects in classroom. It plays an important role in teaching-learning process because it is used to convey the teaching materials to students, to facilitate the teaching-learning process. Beside that it can be a source for teacher who has limited teaching experience. It is provided in many subjects in school like English textbook, science textbook, social textbook, religion textbook, civic textbook, etc.

In English classroom, textbook is used to serve the learners' need about language skill. It also provides informations and knowledge that the students need which can not be given by the teacher. The main point of the textbook is to improve the students' English competence. In another words, the textbook is a tool for the teacher for transferring the knowledge. The textbook may have different amount in providing the language skills. It depends on the writers.

Reading material is one of the contents of the textbook besides listening instruction, some exercises, writing task and some conversation scripts. Reading material is usually in the form of text that is used to teach reading like pronouncing words, comprehending the content of the text, getting vocabulary, and also understanding of grammar. Through the text, the students can get information and the knowledge and also the vocabulary and the grammar. It is provided in some types which are called as genre. The types of genre are arranged well based on the curriculum.

In the reading section, every students usually get difficulties in comprehending a long text or a dense text such as narrative text. When they found narrative text with long and many paragraph, they would get bored firstly. Getting bored makes them get difficulties in comprehending the text. But in fact the main point of difficult text is the lexical density of the text, in which the more lexical items the text has, the more difficult the text is. If the text is formed in grammatical configuration, the text is not too difficult. While if the text is formed in lexical configuration, the text is categorized in difficult text.

Nowadays, every student should be able to understand every reading text in the textbook which is covered in the curriculum of the unit level of education. In the curriculum, reading material should be relevant to the students' needs. The teachers have the freedom to choose the teaching media or strategy to improve the students' communicative competence which is relevant to the students' condition and needs. One of the students' needs is to understand or comprehend the text based on the situation given in English subject.

Lexical density is a condition of the words' proportion in the text. It shows the ratio of lexical items to grammatical items. Lexical items consist of noun, adjective, verb, and some adverbs while grammatical items consist of determiner, pronoun, most preposition, conjunction, finite verb, and some classes of adverb. Lexical density shows the complexity of words within text. It describes the development of lexical in the written language.

The density of text is often unavailable for the students' level. Sometimes, the students who are at the first level of senior high school get a text that has most lexical items which make the students difficult to understand the text. The amount of lexical items in a text can influence the length of a text and measure the level of difficulty of the text. The more the lexical items, the text has the more difficult the student has. The lexical items are known as an open system in which one word can have more than one meaning.

As the source of knowledge, textbook has an important role in learning process. When the students get difficulty to understand the content of the textbook especially the reading text, the students will be hard to get the knowledge of the textbook. The proportion between the lexical items and the grammatical items in the text certainly will determine the difficulty of the text. Through the lexical density of the text, teacher can know whether the text is easy or difficult for the students. So the teacher can decide which appropriate strategy can be applied in the reading text based on the complexity of the words especially the lexical items.

Regarding the previous researcher on lexical density, various texts have been examined and different outcomes have been achieved. With reference to lexical density, Johannson (2008) found that 10-year-olds have higher lexical

density in the written text than spoken text, 13-year-olds have a genre effect in their result where the narrative texts have higher lexical density than expository texts, 17-year-olds have higher lexical density in the written texts than spoken texts with no genre effect, and the adults have higher lexical density in their written text and there is no genre effect.

In the other hand, To, Van, and Thomas (2013) investigated the lexical density and readability in English textbooks. The result shows that the text for upper-intermediate has low lexical density than other texts for elementary, pre-intermediate and intermediate. Aside from written texts, lexical density has been examined in spoken texts. It is conducted by Alami, Sabbah, and Iranmanesh (2013) entitled male-female discourse difference in terms of lexical density. The result shows that male and female discourses are almost equally dense. In other words, the gender of the speaker has no effect on the lexical density of discourse.

Based on the explanations above, there are several reasons why the writer chooses the textbook. First, it is one of the textbooks that is suitable with the current curriculum. Second, it is often used by some schools in Medan so it is important to know whether the reading texts are appropriate for the students. Third, the writer wants to know the lexical density of reading text in the textbook. Moreover, in order to comprehend the thesis, the writer will take Halliday's theory because he mentions briefly and clearly about the lexical density.

#### *Research Question*

Based on the background of the study, the problem of the study is formulated as the following :

1. How is the lexical density especially the lexical items formed in the reading texts of Look Ahead textbook?
2. What type of genre which has the highest lexical density found in the reading texts of Look Ahead textbook?

## *Conceptual Framework*

### **Reading Text**

According to Harmer (1998:68), reading text provides opportunities to study vocabulary, grammar, punctuation and the way to construct paragraph, sentence and text. Tiedemann (2011) says that reading text is a tool of reading, because it is an instrument that is used to read. The form may be in visual signs and symbols including written alphabetic text. So, reading text is a written text or passage that is used to read in order to study vocabulary, grammar, and punctuation and the way to construct sentence, paragraph and text.

Look Ahead textbook published by Erlangga is a textbook that is common used by some schools. It is used in the two semesters of teaching-learning process. The reading materials in the textbook are arranged well. The reading text is designed with pictures which can drag the students' interest to read. Some texts are written by giving a clear discussion or explanation of a particular genre that can help students to learn the social purpose, generic structure, and language features of the texts. The exercises of the reading texts are given in the various kinds. The students are asked to answer some questions related to the text and determine the generic structure of the texts. The designers arrange the questions interestingly that can facilitate the students to understand the text.

In Senior High School, there are some kinds of genre. They are narration, recount, procedure, description, news item, exposition, explanation, discussion, and review. But, narration, explanation, discussion, and review are texts that are discussed in the twelfth grade of senior high school. Those are genre that have most complexity of words especially the lexical items.

### **Textbook**

Textbook is a manual of instruction or a standard book in any branch of study which is produced according to the demands of educational institutions. Ur (1999:79) says that textbook provides texts and learning tasks which are likely to be of an appropriate level for most of the class. According to Ardini (2010)

textbook is crucial component in education. The models of teaching and learning are applied into a textbook. Moreover, Syafitri, Sada, and Sumarni (2014) state that textbook has an important role for teacher to explain more detail and for students to learn easily. So, textbook is a manual of instruction that provides texts and learning task to help teacher and students in teaching and learning process.

Look Ahead gives the gap between the classroom and the real world in which students are used to do things through language, such as to share information, to enquire, to express attitudes, to entertain, to argue, to construct ideas, and to order experience.

### **Lexical Density**

Lexical density is a term that is used in text analysis. Thornbury and Slade (2006:44) state that lexical density is a measure of the ratio of the text's content words to its function words. It is quite different with Johansson (2008:65), she states that lexical density is the term which is most often used for describing the proportion of content words (nouns, verbs, adjectives, and adverbs) to the total number of words. Moreover, Halliday (1985:63) gives more detail explanation about the lexical density. He defines lexical density as the number of lexical items, as the proportion of the number of running words. He refers to use lexical items than lexical word because they may consist of more than one word, for example stand up, take over, call off, and other phrasal verbs all function as single lexical items.

A text with a high proportion of lexical items or content words has high information than a text with a high proportion of function words (prepositions, interjections, pronouns, conjunctions and count words). In another words, Rahmansyah (2012) states that the higher the lexical density of a text is, the more information there is and the more difficult it is to understand by readers. If the text has more grammatical items than the lexical items, the text is categorized to the lower lexical density. On the contrary, if the text has more lexical items than the grammatical items, the text is categorized to the high lexical density. Moreover, Sholichatun (2011) states that a high lexical density measures of around 60–70%,

quite lexical density measures of around 50-60%, and a lower lexical density measures of around 40-50%.

### **Lexical Items**

Lexical items or content words are those which contain the main semantic information in a text, and they are fallen into the four main lexical word classes: noun, verb, adjective, and adverb (Jeffries, 2006:83). According to Thornbury and Slade (2006:44), content words are words that carry a high information load such as noun, adjective, lexical verb and some adverbs. Moreover, Halliday (1985) defines lexical items as part of an open system rather than closed set because it is possible to new items can be added. In conclusion, lexical items or content words are parts that carry high information in text and called as open classes in which new words can be added. These are parts of lexical items.

### **Noun**

Noun is a word which names things and persons (Verspoor and Sauter, 2000:88). The lists are like woman, man, boy, book, desk, chair and so on. In linguistic, a noun is a member of part of speech which can occur as the main word in the subject of a clause, the object of a verb, or the object of a preposition.

### **Adjective**

According to Harmer (1998) adjective is a word that gives more information about a noun or pronoun. Gelderen (2002) says that adjective is a word that modifies a noun (beautiful, good, cheap) and describes qualities (proud, happy, excited). Moreover Jeffries (2006:90) states that the functions of adjective are as the pre-modifier to the head noun in a noun phrase (a brilliant artist), and following an intensive verb as the complement of a clause (the artist is brilliant).

### **Verb**

Verb is called as doing word. According to Gelderen, 2002 verb is a lexical category which often expresses a state, act, event, or emotion. For example, go, work, stand, cut, etc.

### **Adverb**

Adverb is a word that modifies a verb, adjective, or other adverbs, e.g proudly (Gelderen, 2002). According to Johansson (2008:67) adverb that is counted as lexical items are all adverbs that derived from adjectives. For example, Quickly, beautifully, slowly, happily, etc

### **Grammatical Items**

Gelderen (2002) says that grammatical categories do not contribute to the meaning of a sentence and merely as parts or as connectors. While Halliday (1985) states that grammatical items are those that function in closed system because the new words are not easily added. In the English language grammatical items include auxiliary verb, determine, pronoun, most preposition, conjunction, and some classes of adverb.

#### **Auxiliary verb**

Auxiliary verb is a verb that can not stand on its own but that helps (combines with) another verb. For example, ‘be’ (is, am, are, was, were), ‘do’ (does, did), and ‘have or has’, and the modal auxiliary verbs, shall, should, will, would, can, could, may, might, must or ought to.

#### **Pronoun**

According to Harmer (1998) pronoun is a word that is used to replace a noun or noun phrase. Pronoun is to substitute for more complex nouns and noun phrase in order to make the language more efficient and avoid repetition. For example, I, you, we, myself, himself, themselves

#### **Preposition**

According to Harmer (1998) preposition is a word which is used to show the way in which other words are connected. Jeffries (2006) states preposition has similar meaning to subordinators because they link and show a meaning relationship. Preposition usually introduces dependent noun phrase. Preposition is a word that is indicating location (in place and time), direction and relationship (Gelderen, 2002). For example, under, on, in, at, in front of, beside, between, etc



### **Determiner**

According to Harmer (1998) determiner is article that belongs to a class of words. Determiner usually comes before a noun or at the beginning of a noun phrase. Then, Gelderen (2002) says that determiner is a word that points or specifies. It is situated before the noun head of the phrase, and before any adjectives that may be in the noun phrase. For example, a, an, the, etc

### **Conjunction**

Conjunction is a general term to describe a word that joins two or more words or sentence together (Gelderen, 2002). Conjunction can be divided into coordinating and subordinating conjunction. According to Jeffries (2006:99), coordinating conjunction is to join, or coordinate two or more clauses such as “and, or, and but” while subordinating conjunction is used to make clear that one unit or structure is less important grammatically than another (if, so, that, although).

### **Some Classes of Adverb**

Some classes of adverb here means that adverbs which are not included in two kinds of adverb above. For example, here, there, now, then, always, etc

### *Methodology*

In conducting the research, descriptive qualitative research was used. Patton and Cochran (2012) state that qualitative research is characterized by its aims and its methods which generate words, rather than numbers, as data for analysis. It meant that the data of the study were analyzed by describing, identifying and analyzing the texts. Descriptive research meant that the data of this study were described or explained.

One of the types of qualitative research that was used in this study was document or content analysis. Content analysis is focused on analyzing and interpreting recorded material such as textbook within its own content (Ary, Jacobs, and Razavieh, 2002). Related to this theory, the content of Look Ahead textbook for the twelfth grade students of senior high school published by Erlangga was analyzed based on the density of the lexis.

### *Technique of Analyzing the Data*

The data were collected by taking 2 texts from each genre (narration, explanation, discussion, and review) from Look Ahead textbook. The texts were analyzed by identifying and classifying the lexical items (noun, adjective, verb, and adverb), which followed by counting the ration of the lexical items and the total words to know the lexical density of the texts.

### **Result and Findings**

The data were firstly read to find out the words or items that belongs to lexical items which found in eight reading texts, counting the lexica items and the total words in every text, and then counting the ratio of the lexical items to the total words to find out the percentage of lexical density of the text.

**Table 4.1. The Classification of Lexical Items in the Reading Texts**

No	Title of Reading Texts	Genre	Types of Lexical items				The Total items
			N %	Adj %	V %	Adv %	
1	TFL	Narrative	188 (50,54)	54 (14,52)	125 (33,60)	5 (1,34)	372
2	THOJAT B	Narrative	163 (46,57)	50 (14,28)	125 (35,71)	12 (3,43)	350
3	HRS	Explanation	85 (66,93)	12 (9,45)	30 (23,62)	0 (0)	127
4	SRAR	Explanation	130 (60,46)	28 (13,02)	56 (26,05)	1 (0,47)	215
5	IXEN	Discussion	94 (54,65)	24 (13,95)	53 (30,81)	1 (0,59)	172
6	APAC	Discussion	71 (59,66)	18 (15,13)	28 (23,53)	2 (1,68)	119
7	TJB2	Review	274 (64,02)	66 (15,42)	82 (19,16)	6 (1,40)	428
8	S2TR	Review	154 (56,20)	47 (17,15)	62 (22,63)	11 (4,02)	274

Where:

N : Noun

V : Verb

Adj : Adjective

Adv : Adverb

**Table 4.2. The Percentage of Lexical Density in the Reading Texts**

No	Title of Reading Texts	Genre	Lexical Items / Content Words	Grammatical Items / Function Words	Total Words	Lexical Density (%)
1	The Faithful Lovers	Narrative	372	474	846	43,97
2	The History of Jack and the Beanstalk	Narrative	350	367	719	48,96
3	Human Respiration System	Explanation	127	117	244	52,05
4	Sound Recordings and Production	Explanation	215	153	368	<b>58,42</b>
5	Is X-ray Examination Necessary?	Discussion	172	234	404	42,57
6	Abortion: Pro and Contra	Discussion	119	130	249	47,79
7	The Jungle Book 2	Review	428	340	768	55,73
8	Spiderman 2 – the Review	Review	274	238	512	53,51

### **Research Findings**

After analyzing the data, the writer found that all of the reading texts namely narration, explanation, discussion, and review were dominantly formed by using noun which followed by verb. Narrative texts were formed by noun and verb. Explanation texts were formed by noun and verb, Discussion texts were formed by noun and verb, and Review texts were formed by noun and verb. From all of the texts the most noun was found in Review text.

From eight texts which were analyzed, there were 4 texts which had lower lexical density and four texts had quite lexical density. The lower lexical density were found in discussion texts, narrative text, discussion text, and narrative text. The quite lexical density were found in explanation text, which

followed by review text, and explanation text. From all of the texts, the highest lexical density was found in Explanation text (58,42%).

## **Conclusions and Suggestions**

### *Conclusions*

After analyzing the lexical density especially the lexical items of the English reading texts in the textbook for senior high school grade twelve, it can be concluded that the reading texts are formed by noun which followed by verb and adjective. The more lexical items (noun, adjective, verb, and adverb) the text has, the more difficult the text is. The most noun is found in the review text entitled "The Jungle Book 2" (274 items). The highest lexical density among the eight texts that written in four genre (narration, explanation, discussion, and review) was found in the explanation texts entitled "Sound Recordings and Reproduction" (58,42%) which is categorized to the quite lexical density and the text is not too difficult.

### *Suggestions*

Based on the conclusion to the findings pointed above, the following suggestions are needed to be considered in conducting the related research. For the textbook's writers, they can use this study to present textbook with balance composition between lexical items or content words and grammatical items or function words of reading texts. Because the easy text is formed with more grammatical items while the difficult text is formed with more lexical items. For the English teachers, they can apply the result of this study as feedback on their teaching activities to decide the appropriate strategy in teaching the reading texts. so their students can be better in reading skill.

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