

# The Reading Level of the Biology and Linguistics Abstracts

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**Abstract**—Fog Index is a readability test in the text which is introduced by Robert Gunning in 1952. This test is used to measure the difficultness of texts. This current research as a preliminary study tried to figure out the Fog Index of the Biology and Linguistics abstract which obtained from journal abstract indexed by Proquest. This research applied the qualitative research method. The data obtained are taken randomly and being described descriptively. The Fog Index is influenced by the two main elements. The first thing is the average of the total number of words in every sentence and the second thing is the hard word (three syllable or more). The result shows that the average of the total number of words in every sentence in the abstracts in Biology field is 22.10 while in the abstracts in Linguistics field is 29.37. The average of the hard word in Biology field 17.18 while in the Linguistics field is 15.28. Finally, the average of the Fog Index of the abstract in Biology field is 15.71 while in Linguistics field is 17.86. From the data mentioned, it is concluded that the abstracts in Linguistics field is more difficult to be understood than the Biology abstracts is.

**Keywords**— Reading Level, Biology abstract, Linguistics abstracts.

## I. INTRODUCTION

IN Linguistics, text has a main role. A text can be classified into easy or difficult text. To ease in understanding texts depends on the difficulty of the texts. The difficultness of the texts is influenced by many factors. There is an argument that if a text is easy to be understood so it could be classified into the spoken text, in the other hand, if the text is not easy to be understood could be classified into written text. In this paper, the term spoken text does not mean something being uttered orally and written as something being written. The words spoken and written texts are the terms borrowed from Halliday (2004) and Gerot and Wignell (1995).

To classify the text is easy to be understood or not cannot be based on easiness or difficultness of the text but it should be proven scientifically. To proof the easiness and difficultness scientifically can be proven by counting the lexical density and grammatical intricacy of the text. This statement is related to Gerot and Wignell's argument (1995:161). They argue that there are differences between spoken and written text as the following argumentation.

*“Spoken and written languages are both complex but in different ways. Spoken language tends to be complex grammatically and written language tends to be complex lexically. Spoken language tends to be grammatically*

*intricate whereas written language tends to be lexically dense.”*

The argumentation says that spoken and written text has different features; they have different grammatical intricacy and lexical density of the text. This argumentation is also supported by Halliday (2004) in Presnyakova (2011:16) that argues.

*“Typically, written language becomes complex by being lexically dense: it packs a large number of lexical items into each clause; whereas spoken language becomes complex by being grammatically intricate: it builds up elaborate clause complexes out of parataxis and hypotaxis.”*

In this preliminary research, the present writer does not discuss the lexical density or the grammatical intricacy, since the present writer tries to figure out the Fog Index of the abstracts in Biology field and Linguistics field. The term Fog Index is also known as Reading Level. In the other words, the present writer discusses the Reading Level of the abstracts in Biology field and Linguistics field.

## II. METHODOLOGY

In this preliminary research, the present writer tries to analyze and describe the data linguistically by applying the descriptive analysis. The abstracts as the data of the research are taken from the two different fields: Biology and Linguistics field. The Biology texts were chosen as the representation of natural science while the Linguistics texts were chosen as the representation of the social science. From the both types of texts, the present writer obtained the abstract of the articles which are published in scientific journals indexed by Proquest.

The present writer obtained eight abstracts from eight different Biology texts and also eight abstracts from eight different Linguistics texts. The calculation could be done by applying free software in <http://www.usingenglish.com/resources/text-statistics.php>. This software helps the present writer in calculating the Fog Index scale digitally.

## III. FOG INDEX OF THE ABSTRACTS IN BIOLOGY AND LINGUISTICS FIELD

Fog Index is known as Gunning Fog Index. It is a test to measure the readability of a text. The test is supported by some supporting elements. It is supported by the total of words average in every sentence and the percentage of hard words. Hard words or sometimes called complex words are words consist of three or more syllables as described in the following