

Text Readability in 11th and 12th Grade English Textbook of Indonesian Senior High School Published by Intan Pariwara with FKGL Formula

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Abstract

This study analysed text readability on English textbooks of grade 11th and 12th on Indonesian senior high school with FKGL Formula available online at www.readable.com. This study utilised the Flesch Kincaid Grade Level formula by Rudolph Flesch (1948), through quantitative methods. The purpose of this study was to determine the level of readability of the reading texts in those two textbooks. The data of reading texts were 5 reading texts of grade 11th taken by using simple random sampling (recount and expository texts, to represent from a lot of texts) while 5 reading texts of grade 12th (procedure and expository texts to represent from a lot of texts). The results of this study indicate that the textbook is too easy to read and to comprehend for grade 11th of senior high school, does not 1 text that corresponds to grade 11. Hence, an average of 6.8 is obtained in grade 11th and is estimated for grades 7th. And an average of 11.6 in grade 12th is suitable for grade 12th with estimates for grades 12th. This is consistent with the scale of the FKGL calculation readability formula with a scale of 0-12 (such as score 7.1 is suitable for grade 7th, and 7.5 is suitable for grade 8th). Thus, an analysis of the level of readability of English textbooks is needed as the best information and best contribution for reading educators.

Key Words: Readability, Textbook, and Flesch Kincaid Grade Level Formula

Abstrak

Penelitian ini menganalisis keterbacaan teks pada buku teks bahasa Inggris kelas 11 dan 12 di SMA Indonesia dengan Formula FKGL diakses dari www.readable.com. Penelitian ini menggunakan rumus Flesch Kincaid Grade Level oleh Rudolph Flesch (1948), melalui metode kuantitatif. Tujuan dari penelitian ini adalah untuk menentukan tingkat keterbacaan teks bacaan di kedua buku teks tersebut. Data teks bacaan adalah 5 teks bacaan kelas 11 yang diambil dengan menggunakan metode simple random sampling (teks pengalaman dan teks ekspositori prosedur, teks naratif dan teks laporan, untuk mewakili dari banyak teks) dan 5 teks bacaan kelas 12 (prosedur dan teks ekspositori, untuk mewakili dari banyak teks). Hasil penelitian ini menunjukkan bahwa buku teks itu terlalu mudah dibaca dan dipahami untuk kelas 11 SMA, dan memperoleh tidak 1 teks yang sesuai dengan kelas 11. Dan buku kelas 12 sesuai dengan tingkat kelas 12, memperoleh 1 teks yang sesuai dengan kelas 12. Namun, dalam hasil akhir perhitungan teks rata-rata dinyatakan bahwa, setiap buku teks kelas 11 tidak cocok untuk pembaca target kelas 11. Karena rata-rata 6,8 diperoleh di kelas 11 dan diperkirakan untuk kelas 7. Dan rata-rata 11,6 di kelas 12 sesuai untuk kelas 12 dengan perkiraan untuk kelas 12 dan 13. Ini konsisten dengan skala formula keterbacaan perhitungan FKGL dengan skala 0-12 (seperti skor 7.1 cocok untuk kelas 7, dan 7,5 cocok untuk kelas 8). Dengan demikian, analisis tingkat

keterbacaan buku teks bahasa Inggris diperlukan sebagai informasi serta kontribusi terbaik untuk pendidik khususnya skill reading.

Kata Kunci: Keterbacaan, Buku Teks, dan Flesch Kincaid Grade Level Formula

I. INTRODUCTION

Reading has an important role in human life throughout time in obtaining information and knowledge. Accordingly, reading presents as a visual-printed material (e.g. in a textbook, letter, articles) that is aimed to convey information and enrich knowledge. Supposedly, reading is an activity of interactive process between reader and text simultaneously (Alyousef, 2006). In addition, Patel and Jain (2008) noted that reading is an interpretation of the meaning of printed texts (i.e. written symbols). Additionally, reading skill is vital instrument for academic performance. In line with that, Richards and Schmidt (2002) described reading skills as skills needed for discerning key concepts, comprehension of sequences, attention to specific information, making inferences, making comparisons, and drawing conclusions in second-and foreign-language teaching, moreover in school environment. Overall, learner's good ability of understanding reading texts will foster to construct meaning to find information and knowledge, mainly in textbook.

Textbook is a specific reading field of study and is standardized text. It is compiled for educational purposes which are equipped for teaching process that should be harmonious and easy to understand by readers in schools and college. Moreover, Jusuf (2018) denotes that textbook has powerful function, because teachers need to extract information from it as sources to be taught and learned within a limited time duration. In other words, textbook has many advantages in teaching and learning process, particularly in English language teaching (ELT). Also, Muslikhati (2015) asserted that texts in textbook must conform with or fit to the level of difficulty or readability. Moreover, it should have already been assessed in terms of readability before it is used in educational settings (Salihah, 2019). Hence, the textbook has a vital role in teaching and learning process that must be comprehended by the target reader.

Reading comprehension, mainly in textbook, is a skill of interpreting text, knowing its meaning, and connecting according to what the reader actually recognizes. As they read a text, they interact with textual features such as syntactical and lexical features integrating to meaning which can be recognized as characterization of different types of text. This will

be of interest of this study. Nevertheless, this study focuses only on textual features to be evaluated. It is argued that textual features influence reader's performance, moreover text readability or difficulty.

Accordingly, Richards and Schmidt (2002) claimed that text difficulty deals with the easiness of text to read and comprehend. Readability is influenced by many factors, ranging from the length of a word, sentence, and vocabulary. Additionally, Rapp (2005) stated that readability refers to the level of complexity of text content, and level of which target readers can read (was cited in Bahrudin, 2016).

Scholars have developed and produced more than 50 readability formulae. Of all this, though, there are four formulas that have been widely used until today. They are (Flesch, 1948), Flesh-Kincaid Grade Level (GL) score (Flesch, 1951), the Dale-Chall readability formula (Chall & Dale, 1995), and the Fry index (Fry, 1968, 1977). Accordingly, such quantitative formula for readability has been claimed as an indicator correlating with complexity of text (Koda, 2005). Additionally, Rogers et al., (1975) stated that the readability is indeed a quantitative measure for measuring the "comprehensibility of the written text" (cited in Khodadady, 2017).

Therefore, this study will assess text readability by using formula quantitatively, as following Koda (2005). Accordingly, several researchers utilised readability formula (Fitrawati, et al., 2017; Hidayat, 2016; Alipah, 2019; Indrawan, 2018; Sahiruddin, 2019; Sahiruddin & Agustiawan, Y., 2016, Sunggingwati, 2009). As studies conducted from Fitrawati et al (2017) and Hidayat (2016) by using the FRE formula, they found that only 1 text that was is in accordance with the grade of the target reader. In this matter, from the previous studies, it is assumed that such the FRE readability formula seems to have a weakness in examining the L2 reading.

The most commonly used is Flesch Kincaid Grade Level formula which formula access whether the text is written is suitable to target reader. And it is scaled between the 0 to 12. For instance, if a text has a grade level readability score (e.g. 10), this means the average reader has to be at grade 10 level as well, or above to understand it; or, if score is 7.1, it means that the average reader has to be at grade 7 level or above to understand text in textbook being read. Such assessment (through Flesch Kincaid Grade Level formula) will be utilised in this study. In addition, Hamsik (1948) stated that FKGL formula is used to measure the readability level of both non-native and native reading text.

Overall, it is believed that assessment of reading texts in textbook is needed to conduct to range the level of difficulty and meet difficulty based on the target reader or learner's grade. Accordingly, it influences reader's comprehension. Therefore, this study is motivated to respond a study by Fitrawati et al (2017) and Hidayat (2016) stating that they are not satisfied with the results through FRE formula. Hence, this study will test the novel formulae, FKGL formula as to perceive as well as assess the difference of reading texts in grade 11 and 12 English textbook. This study is limited to seek: To what extent does FKGL formula determine the level of complexity English textbooks in Indonesia.

II. RESEARCH METHOD

This study applied quantitative approach. As Creswell (2014) stated quantitative dealt extensively with statistical data and statistical calculation, either descriptive or inferential. The sampled reading texts were taken from English textbooks of grade 11 and 12 entitled "*Bahasa Inggris untuk SMA/MA Mata Pelajaran Wajib Kelas XI and Bahasa Inggris untuk SMA/MA Mata Pelajaran Wajib Kelas XII, Published by Intan Pariwara*". The data were selected simple random sampling. Taken by sample because it already represents the required data. As Finally, this study was based on readability formula proposed by Flesch (1948) in FKGL formula with the assessment is based on the FKGL formula:

$$FKGL = (0.39 \times ASL) + (18.8 \times ASW) - 15.59$$

Note:

FKGL: Flesch Kincaid grade level

ASL: average sentence length (words number divided by sentences number)

ASW: average number of syllables per word (syllables number divided by words number)

III. RESULT AND DISCUSSION

3.1. RESULT

As after being calculated based on FKGL formula proposed by Flesch (1948), the following table presented the descriptive statistic of reading texts of grade 11.

Table 3.1 FKGL Garde 11

Unit	Topic	FKGL	Estimate Grade
1	Mawar and Her Friends	3,4	3 rd
2	Unity is Strength	4,1	4 th
3	Youtube	7,8	8 th
4	Why Owning a Home Is Important?	10,4	10 th
5	Internet	8,7	9 th
Average		6,8	7th

The texts were taken from 11th grade English textbook by FKGL formula. It showed that there was text 1 appropriate for 3th grade from topic “*Mawar and Her Friends*” by the FKGL score 3,4. *Second*, there was 1 text appropriate for 4th grade from topic “*Unity is Strength*” by the FKGL score 4,1. *Third*, there was 1 text appropriate for 8th grade from topic “*Youtube*” by the FKGL score 7,8. *Fourth*, 1 text was appropriate for 10th grade from topic “*Why Owning a Home Is Important?*” by the FKGL score 10,4, and *fifth*, there was 1 text appropriate for 10th grade from topic “*Internet*” by the FKGL score 8,7 . Overall, from the mean, it is assumed that the textbook is appropriately used for grade 7th with the mean FKGL score was 6,8. Then the following table presented the descriptive statistic of reading texts of grade 12.

Table 3.2 FKGL Grade 12

Unit	Topic	FKGL	Estimate Grade
1	Wawel Castle in Krakow	12.9	13 th
2	Visit Berlin	11.9	12 th
3	Toraja	7.2	7 th
4	MRT Jakarta	13.5	14 th
5	The Jakarta Manpower	12.9	13 th
Average		11,6	12th

The texts were taken from 12th grade English textbook by FKGL formula. It showed that there was text 1 proper to 12th grade from topic “*Wawel Castle in Krakow*” by the FKGL score 12,9. *Second*, there was 1 text proper to 12th grade from topic “*Visit Berlin*” by the FKGL score 11,9. *Third*, there was 1 text proper to 7th grade from topic “*Toraja*” by the FKGL score 7.2. *Fourth*, 1 text was suitable for 14th grade from topic “*MRT Jakarta*” by the FKGL score 13,5. And *fifth*, 1 text was proper to 12th grade from topic “*The Jakarta Manpower*” by the FKGL score 12,9. Overall, from this mean, it is assumed that the textbook is used for grade 8th with the mean FKGL score was 11,6.

3.2. FINDINGS AND DISCUSSION

The most common used for readability formula are the Flesch, Flesch Kincaid Grade Level, Fog Index and the Dale-Chall readability formula. Nevertheless, the Flesch formula as the leading authority in complexity study (Flesch, 1948). As Hamsik (1948) added that Flesch formula where suitable for the non-native and native speaker is the Flesch Kincaid Grade Level formula. It aims to assess whether the text is written in a literature is suitable to the target reader or not. Additionally, the higher score of the scale 0 to 12 which means the higher, the harder text to read and to understand. For instance, the score of readability text is 7.2 is suitable for grade 7th or if the score is 7.6 is suitable for grade 8th. And Early readability study on English textbook in Indonesian context conducted from Sunggingwati (2009) showed in her finding that the used of readability formula can predict text difficulty. In this case, the use of FKGL formula is needed to examine the English textbook used by the target reader in Indonesia.

Based on the finding from grade 11th that was not suitable text. The closest text has FKGL score was 10,4. In this matter the topic text *“Why Owning a Home Is Important?”* was predicted for 10th grade level. While, from grade 12th there was 1 text suitable. The text has FKGL score was 11,9. In this case, the topic text *“Visit Berlin”* was predicted for grade 12th grade level. From another score, it was not suitable for grade 11th and 12th. It had been occurred in the earliest studies from Hidayat (2016) and Fitrawati, et al (2017). They used the Flesch Reading Ease formula, then from overall reading texts, only 1 text was suitable to each level and the last mean scores were the textbooks were suitable.

However, this study at the last two graders mean predicted the two textbooks of 11th grade and 12th grade. This mean result did not correlate with the previous research finding for grade 11th. The previous research found unsatisfied by using the FRE formula for grade 11th and 12th. Meanwhile, this study utilised the FKGL formula. As stated from Greenfield (1999) that the FKGL formula was compatible formula used to measure the non-native and native reading text. Overall, the FKGL mean score from 11th grade was 6,8 suitable for 7th grade and the FKGL mean score from 12th was 11,6 suitable for 12th grade.

IV. CONCLUSION

It can be concluded that the findings from calculations using the FKGL formula from each grade obtained 1 text that corresponds to grade 11th and 12th. However, in the final

results the calculation of the average texts was stated that, for grade 11th was not appropriate with the level. Because an average of 6,8 was obtained in grade 11th and predicted for grade 7th. And an average of 11,6 in grade 12th and predicted for grade 12th. This is consistent with the scale of the FKGL calculation readability formula with a scale of 0-12 (such as score 7.1 is suitable for grade 7th, and 7.5 is suitable for grade 8th).

By the readability formula to add information and knowledge that it is important for us as the educators to be more aware with the reading materials in the school environment. This kind of research will continue as proof of shared responsibility for reading material that suitable to the target audience as students and readers. And give the best contribution for the government especially the Ministry of Education and Culture of Indonesia, whether such textbooks, mainly texts are appropriate to students regarding with the appropriateness of students' level. For teachers and tutors, they can get further insights about texts that provide big influences of the understanding of student learning based on the readability of texts especially, regarding with its complexity.

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