

AN ANALYSIS OF THE READABILITY OF ENGLISH TEXTBOOKS USED BY THE STUDENTS

Nurdiana¹, Rizki Fiprinita², Afrizal^{*3}, Susmitra Muhammad Efendi⁴

Faculty of Education and Teacher Training,
State Islamic University of Sultan Syarif Kasim Riau,
Pekanbaru, Riau, Indonesia

nurdiana@uin-suska.ac.id¹, rizki.fiprinita@uin-suska.ac.id², afrizal.msi@uin-suska.ac.id³,
susmitra17@gmail.com⁴

ABSTRACT

Investigating the students' readability level of the English Textbook used in the second grade of SMK Negeri 1 Kelayang was the objective of this research. There were 25 students in the sample. This research used a content analysis method with a quantitative approach. In collecting the data, the researchers distributed a test named the Cloze test. The research finding was that the mean score of the Cloze test was 18. Based on the judgment of the students' readability level, a score below 40 is classified as a frustration level. In conclusion, the English textbook for second-grade students of SMK Negeri 1 Kelayang is not appropriate for the students.

KEYWORDS: *Students' Readability, English Textbook*

1 INTRODUCTION

English is required at elementary, junior, and senior high schools as well as at the university level in Indonesia, where it is regarded as the first foreign language. The four components of language learning—speaking, listening, reading, and writing—must be understood by learners. Language learners have varying priorities when it comes to which language they need to study the most.

One of the most important abilities in the current era is reading. It is common knowledge that a large number of books, periodicals, articles, and manuals are written in English. They should be able to read books and articles in English if those individuals desire to read them, since translation takes time, and once they are translated, they will no longer be original.

Certain media are necessary for both instructors and students to help their work in teaching and learning. A textbook is one of the instructional tools used in schools for students at different levels. In actuality, a textbook is essential for senior high school students studying the language. According to Michael in Reed et al. (1998), textbook materials take up seventy-five percent of class time. Textbooks are the main resource utilized in the classroom. The school need top-notch English language learning resources, such as textbooks. Students should be able to read, comprehend, and understand a good English textbook. Students will be motivated to study English since the content is simple for them to read and comprehend. They often get bored and become irritated with studying English if they are having trouble comprehending the material.

*Correspondence: afrizal.msi@uin-suska.ac.id

Bowers and Christopher Brumfit (1991) assert that meticulous textbook selection is essential, since textbooks significantly influence the efficacy of foreign language instruction and acquisition. Educators use textbooks as a resource to meet the needs of their pupils, especially regarding reading comprehension. Students who use the textbook may do badly in reading comprehension due to its inappropriateness for their reading level.

To aid educators in choosing a suitable textbook for their class, it is essential to assess the readability of the texts included in the textbook according to the students' reading level. Nutall (1982) identifies three viewpoints pertinent to the selection of texts for reading material. The factors include readability, content material appropriateness, and text readability. The selection of reading material is crucial, determined by readability attributes within these frameworks. This is linked to the claim that, in English language teaching and learning activities, instructors serve primarily as material suppliers rather than as producers.

English textbook selection aims to identify the appropriate textbook for students based on their educational levels. To determine the proper English textbook for students, readability analysis can be used to identify the readability levels of the textbooks under consideration. A readability analysis was conducted to determine whether the English texts in the textbook are complex, simple, or easy for students. English textbook adopted "Forward an English by Erlangga 2017".

This textbook is selected as the subject of the study because students perceive the textbook's reading texts as challenging to understand. Additionally, the researcher inquired with the teacher about the reading texts in the aforementioned book, whether they are easily comprehensible to students. The teacher asserted that some students are having difficulty understanding the reading passages in the textbook. Furthermore, the researcher saw that some students had the lowest reading scores during the practical study in which she functioned as a teacher. It resulted from their inadequate understanding of the materials they were reading. The researcher found that although some students understood the reading passages in specific courses, others did not.

SMK Negeri 1 Kelayang is a state senior high school located on Jendral Sudirman Street, Indragiri Hulu, Riau. As a formal educational institution, this school also uses the textbook the title "Forward an English by Erlangga 2017". Based on interviews with a few students at this school, it was found that students fail to comprehend the reading texts in their English textbook. Apart from that, the author and/or the publisher of the English textbook hardly ever take into account the part concerning the readability of the textbook. Moreover, not all the information in the English textbook would be relevant for the students.

"Forward an English by Erlangga 2017" is one of the textbooks used in the English class, according to the interview with the English instructor at SMK Negeri 1 Kelayang. Parekeme dan Abgor (2012) contend that readability is one of the elements influencing students' comprehension of the material. The researcher intends to do a study to determine the readability of the English Zone textbook for the tenth-grade senior high school level, which was published by Penerbit Erlangga. Because it is believed to assist students in employing the four learning skills—speaking, listening, reading, and writing—to become skilled in conversation, the researchers chose this textbook.

Moreover, some previous studies have discussed the readability. The first research is “The Readability of Reading Textbook Instruction in The Textbook Let's Talk English for Students of Grade VIII for SMP 257 Jakarta Timur”. It is an unpublished research written by Nursanti Handayani. The researcher of the research found the result that all the texts in the textbook “Let's Talk English for Students of Grade VIII” are readable. Then, a research titled “An Analysis of the Readability Level of Reading Texts in Passport to the World 2 Textbook by Using Cloze Test”. The finding of this research is that all the texts in the textbook “Passport to The World 2” are so easy to read by the students, which means that the texts are too readable. The third research is “The Analysis on The Readability of English Textbook English on Sky 2 Focused on Reading Passages Used at The Second Year of Smp Dharma Karya UT, Pamulang”. From this research, it is found that the texts in the textbook “English on Sky 2” are not readable for the students.

Furthermore, based on what the researcher found, there has been no study about the readability level of “Forward an English by Erlangga 2017”. For this reason, the researcher is more interested in analyzing the readability level of the English textbook “Forward an English by Erlangga 2017”. In more specific terms, the researcher uses one instrument to analyze the readability level of the English “Forward an English by Erlangga 2017”, which includes Content Analysis with two parts, that is, Flesch reading ease and Cloze procedure test.

The novelty of this research lies in the focus of the readability study of the Forward in English by Erlangga 2017 textbook, which is specifically used by grade XI students of SMK Negeri 1 Kelayang, which has never been studied in this context before. Different from previous research, which generally only assessed the readability of junior high or high school textbooks in general, this study combines two approaches to readability analysis, namely the Flesch Reading Ease formula and the student performance-based Cloze Test, thus providing a more comprehensive picture between the level of linguistic difficulty of the text and the actual ability of students to understand reading. In addition, the finding that the majority of students are at the frustration level reinforces the empirical contribution of this study in revealing the gap between the textbook standards used nationally and the characteristics of readers in vocational schools, so that the results of this study have strong practical implications for teachers, schools, and policymakers in the selection and evaluation of English textbooks. The researchers aim to articulate the issue as follows: What is the readability level of the English textbooks used by the students?

2 METHODOLOGY

This study used content analysis with descriptive study as the research design to analyze the readability level of reading texts in Forward an English by Erlangga 2017. There are 8 chapters and an enrichment in the textbook, with a total reading texts are 18 reading texts. The reading texts consist of 2 transactional interaction texts (personal letters), 5 interpersonal interaction texts, 1 formal invitation text, 1 analytical exposition text, 1 personal letter, 6 lyrics of the song, 1 explanation text, and 1 narrative text (folktale). There was one instrument used in the study, which was a test, and two approaches, which were Flesch Reading Ease and Cloze-Test. Measuring Flesch reading is related to whether the textbook is suitable for students, as assessed by the number of syllables, words, and sentences. The Flesch Reading Ease test is administered to students to evaluate text

comprehension. The test, however, used by the researcher is a multiple-choice cloze test. The study population comprises eleventh-grade students at SMK Negeri 1 Kelayang.

Table 1. Total Population

No.	Class	Male	Female	Total
1.	XI ATP1	16	19 35	35
2.	XI ATP 2	15	18 33	33
3.	XI ATP 3	16	18 34	34
4.	XI ATP 4	17	18 35	35
5.	XI APHP1	10	15 25	25
6.	XI APHP2	11	12 23	23
7.	XI APHP3	13	11 24	24
Total population				209

The researchers purposefully selected the participants or class that was considered by the researchers and also by the English teacher's suggestion. Finally, XI APHP 1 was chosen as the sample, which consisted of 25 students.

In collecting data, the researchers chose the three reading texts from "Forward an English by Erlangga 2017," and then the researchers checked that the textbook is appropriate for students by using the Flesch Reading Ease formula. After that, the researchers counted the readability level of the texts by using Cloze Tests.

For analyzing data, the researcher purposely took the results as the sample of the research and counted the results of the test with the steps as follows:

1. The researcher uses the Flesch Reading Ease to assess the text's suitability for students. Simplifying the Flesch readability formula: Flesch provided the following formula to make reading easier: $206.835 \text{ minus } (1.015 \times \text{ASL}) \text{ minus } (84.6 \times \text{ASW})$ is the score 10.

Where:

The location of a scale correlates with its score. The total amount of words divided by the total number of sentences produces the average sentence length, or ASL. Dividing the total syllables by the total words yields the average syllables per word, or ASW.

This formula's result is applied on a scale of 1 to 100, and it is equally defined on a scale of 0 to 30 for "very difficult," 30 to 50 for "difficult," 50 to 60 for "fairly difficult," 60 to 70 for "standard," 70 to 80 for "fairly easy," 80 to 90 for "easy," and 90 to 100 for "very easy." The researcher determined how many of the sample students' cloze test responses were right for each passage.

2. Then the researcher counted the sample students' right answers as a percentage using the formula as follows:

$$P = \frac{f}{N} \times 100\%$$

P = Percentage f = Frequency of the Right Answer N = Number of Items

3. After all percentages of the sample students' right answers were obtained, the researcher added them and averaged them per text. Then it was obtained the average percentage of the sample students' right answers for each text was obtained.
4. The average percentages of correct answers of students from each text are to be compared with the degree of understanding in the following table:

5.

Table 2. Cloze Test Score

Cloze Score Difficulty Level	
Below 44%	Frustration Level
44 – 57%	Instructional Level
Above 57%	Independent Level

(Joseph, 2014)

3 RESULT AND DISCUSSION

A. Results

This chapter describes the data of students' readability in English by using an English textbook entitled "Forward to an English" by Erlangga at SMKN 1 Kelayang. The researcher used only one instrument in this research. It is a test. The researcher used two parts of the test, like Flesch's Reading Ease formula and the cloze test by using an English textbook. The test was used to measure the students' readability level.

a. Flesch's Reading Ease formula.

As previously mentioned, the researcher determines the readability score of the three reading textbooks using the Flesch reading ease algorithm. The syllables, words, and sentences are counted to get the reading score. Additionally, the researcher uses the count word to determine how many words, phrases, and syllables each text has. Typing the text in the website's column is the process for counting them. The quantity of words, phrases, and syllables is then automatically determined. Ultimately, the researcher discovers the following computation result:

Table. 3**The number of syllable words and sentences in the three texts.**

No	Components	Text 1	Text 2	Text 3
1	Syllables	236	230	290
2	Words	156	148	168
3	Sentences	10	11	9

With 290 syllables, 168 words, and 9 phrases, text 3, "English language," is the longest text, according to the table above.

Subsequently, the researchers compute the average sentence length (ASL), syllables per word, and words per sentence (ASW). ASL is determined by dividing the entire word count by the total sentence count. ASW is determined by dividing the total number of words by the total number of syllables.

1) Text 1

$$ASL = \frac{\text{the number of words}}{\text{the number of sentences}}$$

$$ASL = \frac{156}{10}$$

$$ASL = 15.6$$

$$ASW = \frac{\text{the number of syllables}}{\text{the number of words}}$$

$$ASW = \frac{236}{156}$$

$$ASW = 1.5$$

2) Text 2

CapCap

$$ASL = \frac{\text{the number of words}}{\text{the number of sentences}} \quad ASW = \frac{\text{the number of syllables}}{\text{the number of words}}$$

$$ASL = \frac{148}{11}$$

$$ASW = \frac{230}{148}$$

$$ASL = 13.4$$

$$ASW = 1.5$$

3) Text 3

CapCapASL

$$= \frac{\text{the number of words}}{\text{the number of sentences}} \quad ASW = \frac{\text{the number of syllables}}{\text{the number of words}}$$

$$ASL = \frac{168}{9}$$

$$ASW = \frac{290}{168}$$

$$ASW = 1.7$$

$$ASL = 19,7$$

The researchers present the results of ASL and ASW calculations of the text in the following table:

Table. 4
The outcomes of the ASL and ASW computations of the texts.

Text	Average sentence length	Average Syllable per Word
Text 1	15,6	1,5
Text 2	13,4	1,5
Text 3	19,7	1,7

Additionally, after calculating ASL and ASW, the researchers attempted to use the Flesch Reading Ease algorithm to determine each text's readability score.

Text 1

$$\begin{aligned} \text{Score} &= 206,835 - (1,015 \times ASL) - (84,6 \times ASW) \\ &= 206,835 - (1,015 \times 15,6) - (84,6 \times 1,5) \\ &= 206,835 - (15,834) - (126,9) \\ &= 64,092 \\ &= 64 \end{aligned}$$

Text 2

$$\begin{aligned} \text{Score} &= 206,835 - (1,015 \times ASL) - (84,6 \times ASW) \\ &= 206,835 - (1,015 \times 13,4) - (84,6 \times 1,5) \\ &= 206,835 - 13,601 - 126,9 \\ &= 66,334 \\ &= 66 \end{aligned}$$

Text 3

$$\begin{aligned}
\text{Score} &= 206,835 - (1,015 \times \text{ASL}) - (84,6 \times \text{ASW}) \\
&= 206,835 - (1,015 \times 18,7) - (84,6 \times 1,7) \\
&= 206,835 - (18,980) - (143,8) \\
&= 44,05 \\
&= 44
\end{aligned}$$

Following an explanation of how each reading text was calculated, the researchers provide the following table to facilitate the presentation of the computation result:

Table. 5
The readability scores of the three reading materials

Text	Readability score	Difficulty level	Reading grades
Text 1	64	standard	10-12
Text 2	66	standard	10-12
Text 3	44	difficult	College

a. Cloze Test

The researchers used the students' test scores to gather information on their readability. The following table illustrates it:

Table 6
The score of students' readability in the cloze test

NAME	SCORE	Classification
S 1	20	Prevention
S 2	5	Prevention
S 3	15	Prevention
S 4	25	Prevention
S 5	20	Prevention
S 6	15	Prevention
S 7	20	Prevention
S 8	5	Prevention
S 9	20	Prevention
S 10	25	Prevention
S 11	10	Prevention
S 12	10	Prevention
S 13	55	Instructional
S 14	5	Prevention
S 15	25	Prevention
S 16	15	Prevention
S 17	20	Prevention
S 18	20	Prevention
S 19	15	Prevention
S 20	5	Prevention
S 21	20	Prevention
S 22	15	Prevention
S 23	30	Prevention
S 24	15	Prevention
S 25	20	Prevention
TOTAL	450	
MEAN	18	

The table above shows the scores of students' readability of 25 students. The students' lowest score was 5, and the highest score was 55. After presenting the score of students' readability in the cloze test, the researcher wants to show the students' descriptive score of students' readability in the cloze test as follows:

Table 7
The students' descriptive score of Readability in the cloze test

	Frequency	Percent	Valid percent
Valid	5	4	1,0
	10	2	0,5
	15	6	1,5
	20	8	2,0
	25	4	1,0
	30	1	0,25
	55	1	0,25
Total	25	100.0	100.0

From the table above described that from 25 students, (1,0%) of students get score 5, (0,5%) of students get score 10, (1,5%) of students get score 15, (2,0%) of students get score 20, (1,0%) of students get score 25, (0,25%) of students get score 30, (0,25%) of students get score 55.

a. The Students' Readability of the English Textbook

To know the students' readability of the English textbook, the researchers looked at the mean score of cloze test score, as follows:

Table. 8
Descriptive Statistics of the students' readability of the English textbook

N	Minimum	Maximum	Mean	Std. Deviation	
VAR00001	25	5	55	18	10,30776
Valid N (listwise)	25				

Based on the table above, it can be seen that the lowest score of the students' readability of the English textbook used is 5, and the highest is 55, while the mean score is 18. Based on the judgment of the students' readability level, a score below 40 is classified as a frustration level.

Furthermore, the researchers divided the score of the students' readability of the English textbook used into percentages based on their level, as follows:

Table. 9
The percentage of every level of the score of students' readability of the English textbook

No.	Level	Percentage
1	Independent	0%
2	Instructional	4%
3	Frustration	96%
	Total	100%

The independent level is 0%, the instructional level is 4%, and the frustration level is 96%, according to Table 9. It indicates that the majority of students find it challenging to read their English textbooks.

The aforementioned rationale leads to the conclusion that second-grade students at SMK Negeri 1 Kelayang are frustrated with the English textbook's readability.

B. Discussion

The researchers' goal in conducting this study was to find out how readable the English textbook used by SMK Negeri 1 Kelayang second-graders is. To conduct this study, the researchers combined a quantitative methodology with content analysis. Following analysis of the data from 25 respondents, the researchers discovered that the average readability score was 18. A score of less than 40 is considered a frustration level based on the assessment of the students' reading. It indicates that the second-grade students at SMK Negeri 1 Kelayang are not suited for the English textbook being utilized.

Some earlier scholars have conducted studies on the textbook's readability. First, a study named "An analysis of readability level of reading materials in English textbook for the first grade of senior high school" was conducted by Dzulhijjah Yetti in 2019. The result of this research is an English textbook for first-grade senior high school students titled "Bahasa Inggris." This material is inappropriate for tenth-grade learners and was released by the Curriculum and Books Center, Research and Development Agency, Ministry of Education and Culture, Republic of Indonesia. The second study, "The readability of reading passages of an English textbook, 'Pathway to English,' published by Erlangga," was conducted by Nurul Zahra in 2016. The study's findings indicate that students still need assistance from their teachers in order to read the material and that teachers must support their students with their reading.

Based on the explanation above, the researchers concluded that the English textbook "Forward an English by Erlangga 2017" used by the second-grade students of SMK Negeri 1 Kelayang is not appropriate for the students.

4 CONCLUSION

This research objective was to determine the readability of the English textbook. Referring to the data analysis above, the researchers found that there were no students in the independent level, there were 4% of the students were in the instructional level, and there were 96% of the students were in the frustration level. In conclusion, the English textbook for second-grade students of SMK Negeri 1 Kelayang is not appropriate for the students.

REFERENCES

- Asem. (2012). Readability assessment of printed materials: Going beyond readability formulas. *International Journal of Environment, Ecology, Family and Urban Studies (IJEEFUS)*, Vol. 2 No. 4.
- Bertola. (2012). Readability of language textbooks prescribed for junior secondary schools and students' performance in reading comprehension in Bayelsa State, Nigeria. *British Journal of Arts and Social Sciences*, Vol. 9, No. 1.

- Cetin, E. & Sidekli. S. (2018). Reading comprehension skills in terms of the sentiments given in reading texts. *International Journal of Evaluation and Research in Education (IJERE)*, Vol. 7, No. 4.
- DuBay. (2004). The principle of readability. Costa Mesa: Impact information. p.21.
- Joseph. (2014). Readability level of recommended chemistry textbooks and students' academic performance in senior secondary schools in Ekiti State, Nigeria. *International Journal of Education and Research*, Vol. 2, No. 9.
- William H. Dubay, *Smart Language: Readers, Readability, and the Grading of Text*, (Costa Mesa: Impact Information, 2007), p. 6.
- Allington, R., and Michael S. (1980). *Learning through reading in the content areas*, Lexington: D.C Heath and Company.
- Bowers, R., and Christopher B. (1991). *Applied Linguistics and English Language Teaching*, London: Macmillan Publishers Limited.
- Nuttal, Christine (1982). *Teaching Reading Skills in a Foreign Language*, Oxford: Heinemann International.
- Parakeme, B, A, D., and Catherine A, A, Readability of Language Textbook prescribed for junior secondary schools and students' performance in reading Comprehension in Bayelsa State, Nigeria, *British Journal of Arts and Social Science*, vol.9, No.1, 2012, p.90
- Pikulski, J. J. (2002), *Readability*, New York: Houghton Mifflin Company.
- Reed, Arthea J. S, et al. (1998), *in the Classroom: An Introduction to Education*, 3rd edition, New York: McGraw-Hill.
- Schulz, Renat A (1982). Literature and Readability: Bridging the Gap in Foreign Language Reading, in *FORUM*, vol. XX, number 4, p.10