

**READABILITY OF ENGLISH TEXTBOOK FOR SENIOR HIGH SCHOOL UNDER
CURRICULUM 2013**

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Abstract: This study is entitled “Readability of English Textbooks for Senior High School Under Curriculum 2013”. The major objective of this study was to determine the readability of BSE English textbooks for Senior High School. In this study, the data were collected from English textbooks under *Curriculum 2013*. The Flesch formula was applied to analyze the readability level of English textbook for senior high school. The samples were taken randomly, in the beginning, in the middle, and in the last of each of the textbooks. The result of the study showed that the totals of the readability of X-grade, XI-grade, XII-grade were 51.9, 65.26, 51.7 respectively. From this result, it could be concluded that the averages of the readability of X-grade and XII-grade textbook were suitable for the level of the class. However, the average of the readability of XI-grade textbook is inappropriate. It also showed that the order of readability’s level in XI-grade English textbook is not arranged appropriately.

Keywords: Readability, English Textbooks, Flesch Formula

INTRODUCTION

One of the important aspect in the teaching learning process is the textbook. Providing textbook is very crucial. It is as a guidance for the students to be able to follow teacher’s instruction well. As one of the media in learning, the textbook should be appropriate and must be selected carefully, because it will straightly bring the teacher and the students to reach succesful aim of teaching learning process.

As a matter of fact, choosing textbook for the students should be underpinned by students’ competence and the contents must fit the grade level of the students and readable. It is not possible that the textbook provided by the teacher sometimes is difficult to understand. This problem may cause the students have less enthusiasm to open and read the book. However, to establish reading willingness among the students is not easy. That is why the media should be easy to be understand because easy reading will successfully help the students to feel the enjoyment of studying and improve the effectiveness of learning.

Furthermore, teachers should know the quality of a textbook and check it thoroughly before distributing it to the students. One method to find out that the textbook is suitable for particular level is through readability. Readability is a terminology to measure the passages in a textbook in case of the easiness or the difficulty to be read (DuBay: 2004). It is to determine whether the passage or the book are readable easily and understandable quickly or not (Pikulski: 2002). In this case, the researcher figured out the readability of the electronic school book used for senior high school level.

This study is aimed to find out the readability of English textbook for senior high school level under *Curriculum 2013*. To know whether the material is appropriate to the level of the students or not, it is important to understand how to find the readability of the text. After finding the score of readability of the text, we can directly know that the score of the readability deals with the level of the students. This study was focused on finding the readability of English Electronic School Book for senior high school level under *Curriculum 2013* and it also described the compatibility of the book with the grade level of the students. The formula that the researchers used to calculate the readability was the formula designed by flesch that is flesch formula.

Additionally, it was expected to give beneficial information toward readability for everyone who read this research, so for those who want to set school books, they can arrange the contents based on the

grade level of the students. It also can give reference for others who want to conduct the same research, and be a guidance for others to determine the readability of any school books.

The use of textbooks in teaching English has consequential role. According to Cunningsworths (1995), a textbook is considered as the expedient for achieving set aims and objectives for learners need. In the light of the importance of the textbooks, it is necessitated to evaluate the textbooks for students. One of the evaluated aspects in the textbooks is chosen texts. There are some criteria in selecting texts for English textbooks. Day (1994) Stated that there are seven considerations in selecting English texts. They are interest, exploitability, readability, topic, political appropriateness, cultural sustainability, and appearance. Especially for readability, it is consisted of lexical knowledge, background knowledge, syntactic appropriateness, organization, discourse phenomena, and length. Islam, Mehler & Rahman (2012) states that readability is “how easily human readers can process and understand a text as a the writer of the text intended”(p.545).

The use of readability is very common in many fields included in science, medicine, law, education, the military and business (DuBay, 2007). It means that readability measurement of texts in English textbook is important to be conducted. It can be helped the teachers to measure how far the students can comprehend the texts, especially for EFL student where they are not familiar with English. With knowing the readability of the text, it will lead to know about the reading ease score. This reading score can be practiced to know description of style and estimated reading grade. Flesch (1974, p.177), in the art of readable writing described reading ease score with this table below:

Table 1. Flesch’s Analysis of Reading Ease Score

Description of Style	Average Sentence Length	Average Number of Syllable Per 100 words	Reading Score	Easy	Estimated Reading Grade
Very Easy	8 or less	123 or less	90-100		5 th grade
Easy	11	131	80-90		6 th grade
Fairly Easy	14	139	70-80		7 th grade
Standards	17	147	60-70		8 th – 9 th grade
Fairly Difficult	21	155	50-60		10 th - 12 th grade (High School)
Difficult	25	167	30-50		13 th – 13 th grade (College)
Very Difficult	29 or more	192 or more	0-30		College Graduate

METHOD

Quantitative research was applied in this study. The researcher determines the variables of the study and find out how they relate to another variable and the collected data will be examined in statistically (Cresswell: 2012).It means that the data of this study will be presented in form of numbers.

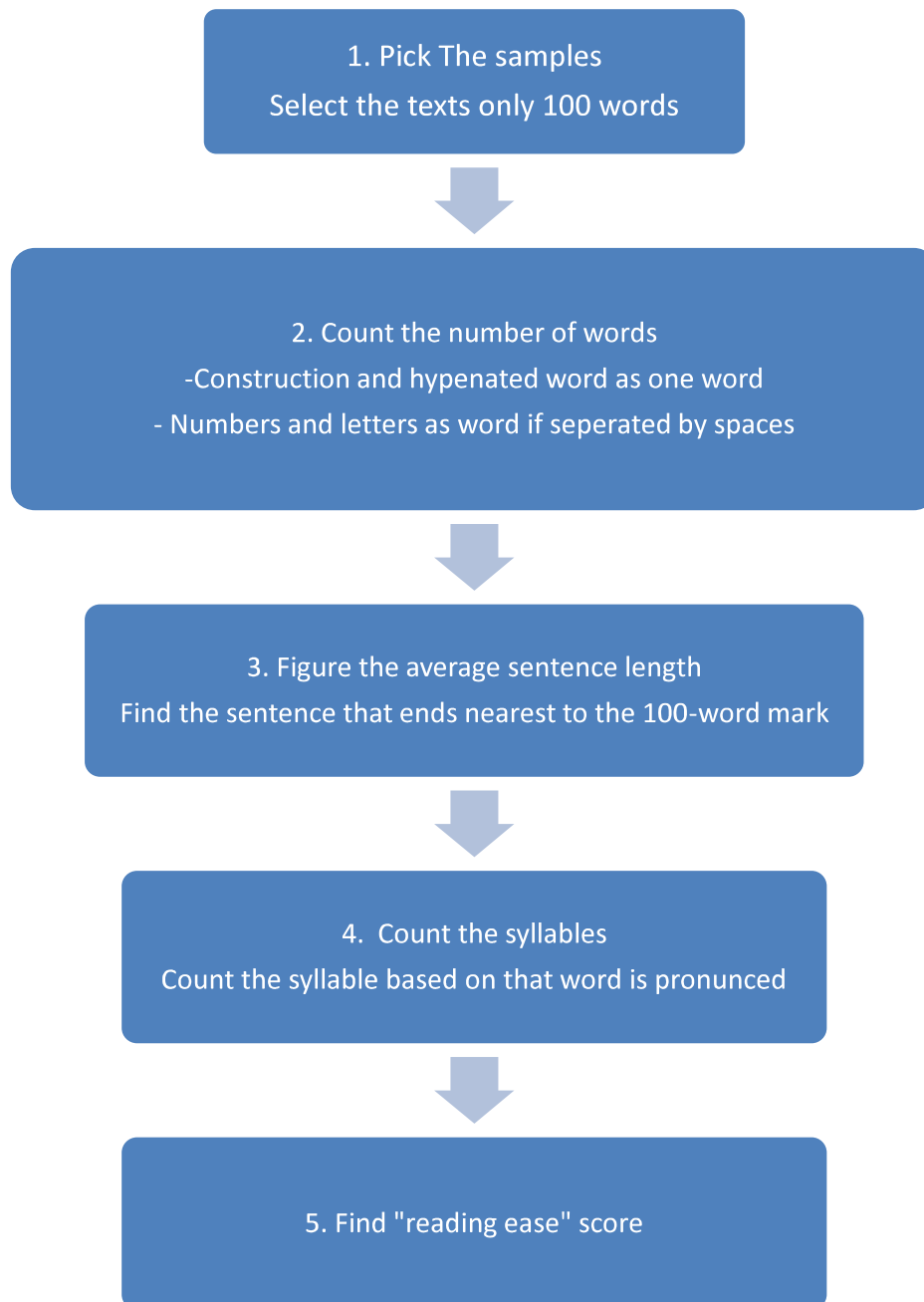
Indeed, the data of this study was taken from English textbooks of X, XI, and XII grade. These books were provided by the government under *Curriculum 2013*, the newest curriculum applied in Indonesia, as the guidance for English teaching learning process. Furthermore, the researchers randomly selected three reading passages from each textbook, the first text was taken from the beginning part of the book, the second one was from the middle part of the book, and the third one was from the last part of the book. Therefore, there were nine passages as a whole. The researchers however intended to analyze whether these samples are appropriate or not with the grade level of Senior High School. In fact, the early hypothesis was that all of the books were compatible for the students.

Additionally, this study used Flesch formula to measure the readability because it is the most common formula for analyzing readability. The formula is shown below:

$$R.E. ("reading ease") = 206.835 - .846 wl - 1.015 sl.$$

- **wl (word length)** :the number of syllables per 100 words
- **sl (the average sentence length)** : divide the number of words in those sentences by the number of sentences.

Before the data were calculated into flesch formula, it extracted through some steps as shown on the figure below:



FINDINGS AND DISCUSSION

The data was taken from textbook under *curriculum 2013*. The data selected randomly in this study were taken only 100 words per text. Furthermore, they were divided into sentences and syllables. After that, all the data were put into the flesch formula. This formula was used to know the score of the readability of each text and the correlation of that to the level of the students.

Total of the data was nine texts which were taken from the 3 English textbooks. Three passages from each textbook and they were assigned from the first part, the middle part, and the last part of the books. First thing to do was to count the number of the words. In this case, the data were limited only 100 words per text. Second, the researchers counted the sentences of the 100 words. Then, the syllables of the 100 words

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also were counted. After knowing the number of the words, sentences, and syllables, all these results were put into Flesch formula. The following is one of the examples how to measure the readability of the texts:

Email from Hannah

Hello, Alia! Let me introduce myself. My name is Hannah. I know your name from my friend, Caroline. She told me that you sent her an e-mail telling her that you would like to have more pen-pals from the US. I’d really like to be your e-pal

Firstly, count the sentences, the words, and the syllables.

1. Hel-lo, Al-ia!
2. Let me in-tro-duce my-self.
3. My name is Han-nah.
4. I know your name from my friend, Ca-ro-line.
5. She told me that you sent her an e-mail tell-ing her that you would like to have more pen pals from the US.
6. I’d real-ly like to be your E-pal.
7. You sound real-ly cool!
8. I guess I’d better tell you some-thing a-bout my-self first.
9. I’m six teen years old and I at-tend Tho-mas E-di-son High School here in Min-ne-a-po-lis, Mi-ne-so-ta, U-S-A.
10. I have two bro-thers and two half sis-ters and I’m the mid-dle child. My fa-ther died a few years a-go so my

Here are the results of the passage:

Word : 100

Sentence : 10

Syllable : 137

Then put the results into the formula:

The Flesch formula:

$$\begin{aligned} \text{R.E. ("reading ease")} &= 206.835 - .846 w/l - 1.015 sl. \\ \text{RE} &= 206.835 - .846 (137) - 1.015 \left(\frac{100}{10}\right) \\ &= 206.835 - 115.9 - 10.15 \\ &= 80,8 \end{aligned}$$

The score of reading ease of this passage is 80.8. Based on Flesch formula, the higher the score, the easier the the subject is. So in a summary, the score showed that the passage is fairly easy for the students.

The table below is the result of all the passages that had been calculated used flesch formlula. It consists of the total of the words, the sentences, the sentence length, the syllable, the readability score, total of readability, and the compatible grade levels.

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Class	Title	The Number of the Data	Word	Sentence	Sentence Length	Syllable	Readability Score	The Total of the Readability	Level
X	An email from Hannah	1A	100	10	10	137	80.8	51.7	10 th - 12 th grade (High School)
	Tanjung Puting National Park	1B	100	5	20	167	44.4		Fairly Difficult
	[Hari Pahlawan] Battle of Surabaya, the Story behind Indonesia’s Heroes Day	1C	100	5	20	185	30.02		
XI	Bullying: A cancer that must be eradicated	2A	100	5	20	154	56.2	65.26	8 th -9 th grade Standards
	President Sukarno of Indonesia: Speech at the Opening of the Bandung Conference, April 18, 1955	2B	100	7	14,28	128	67.3		
	Letter to GOD	2C	100	4	25	129	72.3		
XII	Six Things To Do If You Visit Seattle	3A	100	5	20	152	57.9	51.7	10 th - 12 th grade (High School)

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What is Zebra?	3B	100	4	25	151	53.7		Fairly Difficult
Persian Pottery	3C	100	4	25	163	43,56		

Table 2. The Results of the Readability Score

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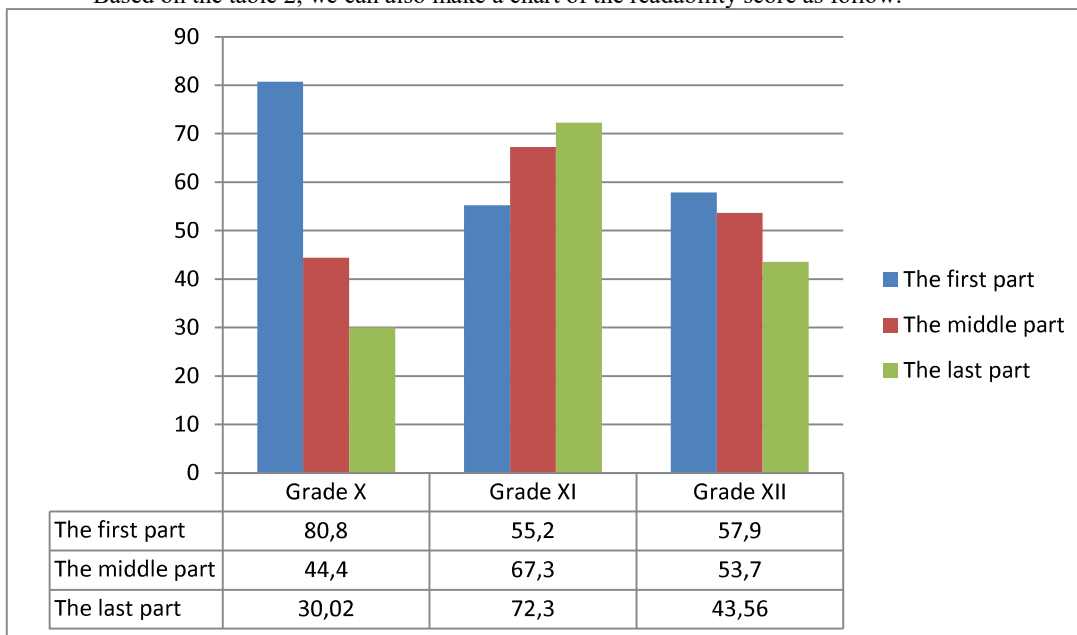
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To find the total of the readability of the text, all the results of the first part, the middle part, and the last part of the book were add then divided with three.

$$\begin{aligned} \text{The total of the readability} &= (1A + 1B + 1C)/3 \\ &= 80.8 + 44.4 + 30.02/3 \\ &= 51.7 \end{aligned}$$

This score deals with the level of the students. Based on Flesch’s analysis of reading ease score, the total of the readability in the X-grade textbook is for 10th - 12th grade (High School) which is fairly difficult.

Based on the table 2, we can also make a chart of the readability score as follow:



This chart shows that X-grade and XII-grade textbooks start from the easy one to the difficult one. However, the XI-grade textbook is arranged from the difficult one to the easy one. This chart also conveys that the 11-grade textbook is constructed inappropriately.

Discussion

According to Government Regulation No. 19 of 2005, the contents of the textbooks should consider the essential aspects namely the feasibility of content, language, and arrangement. This arrangement is close to the readability and the order of the textbook. The readability of the texts has important role to decide whether the texts are suitable to the level of the students or not. Based on the result, the 11 grade textbook is not appropriate to be applied to the high students because it is under their level. In addition, the order of the texts also does not arrange well.

CONCLUSION AND SUGGESTIONS

Based on the findings and the discussion it can be concluded that the English book of X and XII grade showed correlation to the students’ comprehensibility level. The textbooks are appropriately designed in sequence. The materials were arranged from the easy ones to the more complicated topics. Readable books certainly will help the students to study in comfortably. Meanwhile, the data calculated from the XI grade had the opposite result. The readability total score was 65.26. This score actually agreed with the grade level of the students, but the as can be seen on table 2, the contents of the book were arranged in inappropriate way. The topics are begun with the difficult ones, then they went down chronologically to the easier subjects.

Furthermore, designing school book, the author must take consideration from any parts. It’s also very important for the educators to carefully select textbook for the students. Many books were produced improperly. The book must cover students’ grade level capability to create effective atmosphere in learning, the readable book actually will help the teacher and the students to achieve the proper goals of teaching and learning process.

REFERENCES

Creswell, John.W. (2012). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*. University of Nebraska: Pearson.

English Education International Conference (EDUTICON) 2017

“Going beyond Boundaries: Connecting ELT to Today’s World”

Odua Weston Hotel, Jambi – September 6 – 7, 2017

- Cunningsworth, A. (1995). *Choosing your course book (Handbooks for the English classroom)*. Oxford: Macmillan Publisher.
- Day, R. R. (1994, January-March). dosfan.lib.uic.edu. Retrieved August 14, 2017, from uic.edu: dosfan.lib.uic.edu/usia/E-USIA/forum/vols/vol32/no1/p20.htm
- Dubay, W. H. (2004). *The Principles of readability*. Callifornia: Impact Information.
- Dubay, W. H. (2007). *Smart Language : Readers, readability and the grading of text*. Callifornia: Impact Information.
- Flesch, R. (1974). *The art of Readable writing*. New York: HARPER & ROW publisher.
- Islam, Z., Mehler, A., & Rahman, R. (2012). Text Readability Classification of textbook of a low-resource language. 26th pacific asia conference on language, information, and computation, 545-553.
- Government Regulation: http://telkomuniversity.ac.id/images/uploads/PP_No._19_Tahun_2005.pdf
- Humphreys, J.T, Humphreys, A.H. (2013). *Reading Difficulty Levels of Selected Articles in the Journal of Research in Music Education and Journal of Historical Research in Music Education*. US: Arizona State University.
- Mujianto, Y. (2016). *The Comprehensibility of Readable English Texts and Their Back-Translations*. International Journal of English Linguistics. Canadian Center of Science and Education.
- Pikulski, J.J. (2002). *Readability*. USA: Houghtand Mifflin Company.
- Murdos, et. al. (2016). *Examining the Readability of Research Abstracts to Determine Whether the General Public Can Understand Key Findings in Science*. UCLA Clinical and Translational Science Institute

APPENDICES

Data 1 Kelas 10 Page 4

Hello, Alia!

Let me introduce myself.

My name is Hannah.

I know your name from my friend, Caroline.

She told me that you sent her an email telling her that you would like to have more pen pals from the US.

I’d really like to be your Epal.

You sound really cool!

I guess I’d better tell you something about myself first.

I’m six teen years old and I attend Thomas Edison High School here in Minneapolis, Minnesota, USA.

I have two brothers and two half sisters and I’m the middle child.

My father died a few years ago so my

Data 2 Kelas 10 Page 53

Tanjung Put ting National Park is an internationally famous ecotourism destination, which is located in the southwest of Central Kalimantan peninsula.

Visitors from foreign countries come to this park because of its amazing nature.

This is called a park, but unlike any park that you have seen in your city, this is a jungle!

It is a real jungle, which is home to the most interesting animal in the world: orangutans.

Though the park is home to many animals, seeing orangutans is usually the visitors’ main reason to visit the park.

Orangutans, which literally mean, the man of the forest, are

Data 3 Kelas 10 Page 111

On 10 November, Indonesia celebrates Hari Pahlawan or Heroes Day in remembrance of the Battle of Surabaya which started on that very date in the year one thou sand nine hun dred for ty five.

The bloody battle took place because Indonesians refused to surrender their weaponry to British army.

British Army at that time was part of the Allied forces.

The defiant Bung Tomo is the wellknown revolutionary leader who played a very important role in this battle.

It all started because of a misunderstanding between British troops in Jakarta and those in Surabaya, under the command of Brigadier A. dou ble u. S. Mallaby.

Brigadier Mallaby already had

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KELAS XI

Data 1 Page 28

A tragic end to an education that had barely begun thir teen-year-old Kiki stopped schooling because her classmates used to make fun of her relentlessly.

They had accidentally discovered her humble background, her father being a street vendor.

In another case, fif teen year old Dinda could not take it anymore.

She became depressed, left school and stayed at home because she was constantly teased by her classmates for failing in junior high school.

And in yet another, more recent case, some senior students of a junior high school took seven junior students, and subjected them to violent beatings.

Sherry, one of

Data 2 Page 50

This twentieth century has been a period of terrific dynamism.

Perhaps the last fifty years have seen more developments and more material progress than the previous five hundred years.

Man has learned to control many of the scourges, which once threatened him.

He has learned to consume distance.

He has learned to project his voice and his picture across oceans and continents.

He has learned how to make the desert bloom and the plants of the earth increase their bounty.

He has learned how to release the immense forces locked in the smal lest particles of matter.

But has man's political

Data 3 Page 90

Rancho's house – the lone house in the entire valley – was on the crown of a low hill.

From the pinnacle of the hill one could see the rapid flowing stream and next to it vast fields of ripe corn in between the red kidney bean flowers.

Looking at it one could predict that it was going to be good harvest but it needed a rainfall, however brief.

All through the morning Rancho kept scanning the sky for signs of rainfall and he was quite confident that it would rain.

“You know, woman, now we are finally going to get some 129

KELAS XII

Data 1 Page 2

There are 6 musthave experiences that you should do if you visit Seattle where city and nature come together.

If you visit Seattle, arrive with this list in hand and you’ll be off to a foolproof start for exploring the Emerald City’s most unforgettable sights and sounds.

If you visit Seattle: Feel the fresh air on your face as you sail to Bainbrige Island on a Washington State Ferry.

From the ferry you can enjoy the view of the Seattle skyline.

You can also stroll around downtown’s galleries, boutiques, coffeeshouses and cafes.

Seasonal gardens and natural woodlands at the Boedel 152

Data 2 Page 79

Zebras are equids, a family of mammals and members of the horse family, native to Africa.

The word “zebra” comes from the Portuguese zevra, which means “wild ass.”

One can certainly see how the zebra might have been mistaken for the wild ass at first glance, since the animals have similar body types.

Zebras are probably most famous for their distinctive striped coats, which make them quite memorable animals.

In addition to being found in parts of Africa, zebras are also held in captivity in zoos and conservation parks in many parts of the world, for peo ple who want to

Data 3 Page 139

Pottery is one of the oldest and most widespread of the decorative arts, consisting chiefly of functional objects (such as vessels, plates, and bowls) made of clay and hardened with heat.

Earthenware is the oldest and simplest form; stoneware is fired at a high temperature to cause it to vitrify and harden; and porcelain is a fine, generally translucent form of pottery.

Persian pottery (sometimes called Iranian pottery) refers to the pottery works made by the artists of Persia (Iran). The ceramic art of Persia is one of the world's greatest and most influential artistic traditions.

The history goes back