THE READABILITY OF REFERENTIAL BOOK FOR EFL STUDENTS IN ENGLISH LANGUAGE EDUCATION DEPARTMENT

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Abstract

Teachers frequently use textbooks as a media resource for instructional education purpose. A capability to understand a textbook being utilized is vital for students. However, the majority of research revealed that the textbooks used did not correspond to the actual level of students. Therefore, this study aimed to investigate the textbook's readability level as well as any potential factors influencing its readability. This research employed a descriptive quantitative method to identify the textbook's readability using the Miyazaki EFL Readability Index and students' judgments, as well as providing its readability factors. This study's object included the Morphology textbook, and 36 English Language Education Department students batch 2021 at University of PGRI Adi Buana Surabaya. The first finding demonstrated that the textbook's readability using the Miyazaki EFL Readability Index had a very difficult readability level and best suited for graduate university students. The second finding showed that there were 68.52% of students or 25 students agree that the textbook was difficult to read. The third findings indicated that the percentage of factors affecting the textbook's readability was 66.67% including the influence of reader factors (22.22%) and text factors (44.44%).

Keywords: Miyazaki EFL Readability Index; Referential Book; EFL Students

INTRODUCTION

In educational system, textbooks are often used as a referential books especially for university students. Bahtiar (2015) states that a referential book is a scientific writing in the form of a book with the substance of the discussion in one field of science. Textbooks are widely used by students as study material and also used as references in research. Additionally, Owu-Ewie (2015) proposes that since textbook is essential for academic performance. Therefore, it needs to be legible for students to comprehend what they have read. However, most of the studies found that the textbooks used by students has a higher or lower level of difficulty than their actual class (Burton, 2014; Gyasi & Slippe, 2019). For instance, the research by Gyasi & Slippe (2019) discover that the diploma students' textbook was difficult to read and beyond their reading ability. It may be stated that every textbook has a level of difficulty that influences students' ability to read it. According to Pamar (2020), he explains that if students are having difficulty reading a textbook, their reading comprehension would be hampered. Given all these issues, it might be challenging for teachers to determine an appropriate textbook that is relevant for their students. The availability of readability measurement can assist them in selecting the best textbook. Ulusoy (2006) states that many methods can be used to gauge a textbook's readability, including readability formula, cloze procedure, and judgment using checklists or scales. Durwin & Sherman (2010) convey that in addition to being an accurate of text quality from the viewpoint of the learners, student judgment is a crucial factor in the teacher's selection of a book. Therefore, this study use readability formula and the students' judgments of the textbook given to measure the level of readability, as well as its readability factors.

Despite the fact that earlier studies on the subject have been undertaken, few research have employed the Miyazaki EFL Readability Indeks as a readability measurement of textbooks, especially at college student level. Moreover, the current study focused on descriptive quantitative study using Miyazaki EFL Readability Index and students' judgment of the referential book they had read to measure its readability, as well as providing possible factors affecting the textbook's readability. Given the explanation provided earlier, the researcher formulates the problem in three main areas that covers 1) what is the textbook's readability level assessed using Miyazaki EFL Readability Index?, 2) what is the textbook's readability based on the judgment of students?, 3) What are the factors determining the textbook readability?

Bailin and Grafstein (2016) interpret readability as the degree of simplicity or difficulty it is for the reader to understand what is written. It implies that there is a connection between a text's difficulty and the reader's ability to comprehend. Dubay (2004) as cited in Owu-Ewie (2015) also describes it as the content compatibility of reading material that promotes the reader's success and lead to enhance their interest and comfort in reading. The definitions inferred that reading comprehension is essential for readability. Thus, reading materials need to be readable so readers can understand a text properly.

Furthermore, Janan et al., (2021) propose that readability of a text is not just influenced by the length of the paragraphs or words, but also by how engaging and appealing the writing is. Lu (2002) also states that readability can be impacted by two different factors including reader factors and text factors. The reader factors involve the readers' interest, reading motivation, and their prior knowledge. Meanwhile, text factors cover some aspects including vocabulary, color and illustration, text organization, grammar, and conceptual complexity.

In determining how challenging, basic, or simple a textbook that will be learned, readability formula is one of several methods that teachers can employ to gauge students' a text's readability level. It is mathematical formulae that can accurately predicts the reading grade level of text (Bailin & Grafstein, 2016). There are numerous readability formulas that can be applied. In the present research, the Miyazaki EFL Readability Index was implemented. According to Greenfield (2004) explained that Miyazaki EFL Readability Index is a readability measurement that suitable scaled for learners whose their primary language is not English. The results of his study undertaken with Japanese students reveal that this formula indicated more accurate results than the classic western formulas. For this reason, in the situations of both native speakers and EFL learners, he claimed that it has been demonstrated to be largely acceptable. The overall quantity of letters, words, and sentences in a text are taken into account when determining readability. The Miyazaki EFL Readability Index is calculated using the algorithm shown below.

$$EFL\ Difficulty = 164.935 - \left(18.792 \times \frac{letters}{words}\right) - \left(1.916 \times \frac{words}{sentences}\right)$$

Figure 1. **The Algorithm Miyazaki EFL Readability Index**
Source: (Greenfield, 2004)

These calculations' outcomes yields a reading ease score which can determine the text difficulty and the suitable reading grade level for intended readers. The easier reading level in this formula is 100 points, a number below it suggests the textbook with a lower readability level or having a more difficult level. Here the interpretation score of Miyazaki EFL Readability Index:

Table 1. **The Reading Grade of Miyazaki EFL Readability Index**

Reading Ease Score	Style Description	Estimated Reading Grade
0 to 30	Very difficult	University Graduated
31 to 50	Difficult	Post-school/College
51 to 60	Fairly difficult	10th to 12th Grade
61 to 70	Standard	8th and 9th Grade
71 to 80	Fairly Easy	7th Grade
81 to 90	Easy	6th Grade
91 to 100	Very Easy	5th Grade

Source: (Greenfield, 2004)

Apart from the readability formula, it is possible to gauge readability by subjective judgment by engaging the instructor or the target readers (Meyer, 2003; Ulusoy, 2006). Incorporating student feedback on the textbook's readability can aid teachers in selecting books, so they can find textbooks that students enjoy and encourage them to read. Moreover, some studies reveals that the results of students' participation as the target readers in investigating the readability may be more accurately represented (Durwin & Sherman, 2010). The procedure can be done by interviewing or giving questionnaire to them and having them to rate the text difficulty in the textbook. Likewise, Hartono (2017) shows a scale that can be used to test textbook's readability. There are four scales including very difficult, difficult, easy, and very easy, as well as the indicators in each scale.

Moreover, there are several previous research that have relevance to this study. For instance, a readability study utilizing observation, interviews, and readability formulas such as McAlpine Eflaw and Miyazaki EFL Readability Index on report texts in the 11th-grade English textbook undertaken by Yunita et al. (2017) exposed that it proved to be challenging to read, yet the students still seemed to enjoy what they were reading. Similar to the findings of study by Gyasi & Slippe (2019), they disclosed that the reading level of the textbook is considered to be challenging, but it was inversely proportional to the results of the sentence structure analysis indicating low readability. However, in contrast to the results of the previous two studies, Hakim et al., (2021) examined the 10th grade English textbook's readability employing students' views of readability and Coh-Metrix. It demonstrated that the textbook is too easy for them and appropriate for seventh grade, and the students' perceptions of readability level match with each other.

METHOD

This study employed a descriptive quantitative. According to O'Dwyer & Bernauer (2016), descriptive quantitative research involves numerical data to verify a theory or answer any queries about the state of the present situation. This study's object included the Morphology textbook taken from the Morphology and Syntax course entitled *An Introduction to English Morphology: Words and Their Structure* by Andrew Carstairs-McCarthy. Tomlinson (2011) asserts that 10% to 15% of the overall material should go toward the analysis of the textbook and chapters located in the middle of a textbook are the best chapter to examine. As a result, the researcher employed 15% of the textbook's entire content included Chapter V, VI, and VII. The participants were 36 English Language Education Department students batch 2021 who were studying Morphology and Syntax courses at the University of PGRI Adi Buana Surabaya. Moreover, the researcher used the website countwordsworth.com to eliminate human mistake in calculating letters, words, and sentences. The researcher then utilized the Miyazaki EFL Readability Index to quantify its readability and classified the score. After that, the students

were asked to read the chosen paragraph to determine the textbook's readability using a readability scale for students from Hartono (2017). The researcher then asked students who chose difficult indicators to fill the factors of textbook readability questionnaire.

RESULTS AND DISCUSSION

Results

The Textbook's Readability Level Based on Miyazaki EFL Readability Index

Based on the results of calculation using the website countwordsworth (see table 2), it is visible that Chapter V has the most letters, words, and sentences. While, the lowest text is found in Chapter VII. Inferred from the Miyazaki EFL Readability Index calculations, Chapter VII with a score of 29.78 is the greatest readability score. It can be considered that Chapter VII is easier than Chapter V and VI. Chapter V with a score of 29.24 takes place after Chapter VII, while Chapter VI which is received a score of 24.79 is the lowest. It is evident that Chapter VI is more difficult than Chapter V and VII.

Table 2. **The Calculation of Letters, Words, and Sentences and the Readability Score using Miyazaki EFL Readability Index**

Chapter	Number of letters	Number of Words	Number of sentences	Miyazaki EFL Readability Index	Description	Estimated Reading Grade
V	16195	3401	141	29.24	Very Difficult	University Graduate
VI	14942	3127	119	24.79	Very Difficult	University Graduate
VII	8094	1735	70	29.78	Very Difficult	University Graduate
			Average	**27.94**	**Very Difficult**	**University Graduate**

Source: https://countwordsworth.com/

In sum, the readability score analysis from the three chapters in this textbook reflects the same results. They are in the range of 0 to 30 implies that the chapters are very difficult to comprehend and best suited for university graduates. Therefore according to reading grade of Miyazaki EFL Readability Index that the average score of Morphology textbook is 27.94, so it demonstrates low readability which means that the reading difficulty is very challenging and relevant for graduate-level. It proves that this textbook is more difficult for their current level.

The Students' Judgment of the Textbook

The researcher also assessed the Chapter V, VI, and VII of the textbook by giving a readability level assessment scale to the 36 students. The outcomes of the students' judgment are presented below.

Table 3. The Percentage of Students' Judgment in Morphology Textbook

Criteria		Number of Students			Total Votes	Percentage	Total Percentage in two criteria
		Chapter V	Chapter VI	Chapter VII			
Difficult	Very Difficult	2	4	9	15	13.89%	68.52%
	Difficult	22	22	15	59	54.63%	
Easy	Easy	9	9	12	30	27.78%	31.48%
	Very Easy	3	1	0	4	3.70%	
Total		**36**	**36**	**36**	**108**	**100.00%**	**100.00%**

Taking the table above as a basis, the majority of students rated the textbook as difficult with a total of 59 votes and a percentage of 54.53%, or roughly 20 students who chose it. Meanwhile, a few students chose that the book was easy with a total vote of 4 and a percentage of 3.7% or equivalent to only 1 student who chose. In conclusion, the difficult criterion appears to have the highest prevalence of cases. It demonstrates how challenging it is for students to read the textbook.

Furthermore, the four criteria can be narrowed down into two categories. The difficult category receives a percentage of 68.52% students or there are 25 students choosing difficult and very difficult. However, the easy category receives a percentage of 31.48% students or there are 11 students choosing easy and very easy. It may be claimed that a higher percentage fall into the difficult category than the easy one. It might be inferred that many students find the textbook challenging to read.

The Factors Affecting the Readability of the Textbook

Since many students think that the textbook is difficult on the results of students' judgment, which is as many as 68.52% of students or 25 students agree that the textbook is difficult to read at their current level. Therefore, the researcher provided a questionnaire what factors affecting the readability of the textbook with 15 questions. The 25 students were asked to fill the questionnaire. The frequency of yes demonstrates the reading difficulties students face, and vice versa at the frequency of no. The findings of the questionnaire data are shown below.

Table 4. The Percentage of Readability Factors in Morphology Textbook from Lu's Theory (2002)

No	Factors	Indicators	Results					
			Frequency Yes	Percentage	Total	Frequency No	Percentage	Total
1	Reader's Factors	Interest	13	6.00%	22.22%	12	5.11%	11.11%
2			14			11		
3		Motivation	15	7.11%		10	4.00%	
4			17			8		
5		Prior Knowledge	20	9.11%		5	2.00%	
6			21			4		
7		Vocabulary	23	10.22%	44.44%	2	0.89%	22,22%

8	Text's Factors	Organization of Text	17	7.56%	8	3.56%
9		Grammar	19	8.44%	6	2.67%
10		Legibility of Print	10	3.78%	15	7.33%
11			7		18	
12		Illustration and Color	11	6.00%	14	5.11%
13			16		9	
14		Conceptual Difficulty	14	8.44%	11	2.67%
15			24		1	
		Total	**241**	**66.67%**	**134**	**33.33%**

In the reader's factor, the prior knowledge issues becoming more common among students. The results of yes frequency are higher than the preceding indicator as the percentage of 9.11%, although 2% of the votes reflect that they have adequate prior knowledge to understand what they were reading. It implies that it becomes the main difficulties of reader factors that students encounter when reading the textbook.

Furthermore, in relation to text factors especially in vocabulary indicator, it is discovered that there are 10.22% of votes for response of yes and 0.89% of votes for response of no. In comparison to other factors, it becomes the one that students confront most frequently. However, print legibility differs from other indicators, such as the 3.78% vote for affirmative votes and the 7.33% vote for dissenting votes. The number of no responses is higher than the number of yes responses, indicating that many of them do not have an issue with the textbook's print legibility.

As a result, since frequency of yes denotes the textbook's readability factors with the higher percentage of 66.67% than the frequency of no with the percentage of 33.33%. It can be seem that the reader factor has prior knowledge as the highest reader factors that students chose with the percentage of 9.11%. Then it is followed by motivation which has the percentage of 7.11% and interest is 6%. Whereas in the text factors, the majority of students have trouble with vocabulary, which accounts for 10.22%, then followed by conceptual difficulty and grammar are the same at 8.44%, organization of text is 7.56%, illustration and color is 6%, and the lowest is legibility of print with a percentage of 3.78%. It can be concluded that the biggest factors hindering their readability of this textbook are due to a lack of prior knowledge and vocabulary difficulties.

In addition, the reader and text factors are also taken into consideration to calculate the percentage of students who selected each indicator due to their influence on the textbook's readability. Each indicator contributes the outcomes to each factor. In sum, the reader's readability factor receives a percentage of 22.22%. Meanwhile, the percentage for the text factor is 44.44%. It is true that text factors has a greater impact on textbook readability than reader factors.

Discussion

Based on the results of the textbook's readability using Miyazaki EFL Readability Index, it are in line with the study by Yunita et al., (2017) that examine an English textbook for 11th grade and demonstrate that the textbook's readability is more difficult than it should be for the students' actual grade, falling into the category of being difficult and appropriate for college

students. Moreover, in the same case a study carried out by Taylor (2020) applied Miyazaki EFL Readability Index for L2 readers and the Flesch Reading Ease (FRE) for L1 readers. It revealed that the readability score in Miyazaki formula was lower than FRE. It implies that it may be more challenging for L2 learners to read it than L1 learners. For this reason, the Miyazaki EFL Readability Index was employed in this study's research to evaluate the textbook's readability for EFL students. This is further supported by a research from Greenfield (2004) who found that EFL reading texts for whom native language is not English are most suited for the Miyazaki EFL Readability Index.

According to the second findings of this study on the textbook's readability assessment by the judgment of students, it is contrast with a study by Hakim et al. (2021). It showed that the large number of students believe that the book is easy for their reading level and are correspond with the Coh-Metrix measurement from his study, which is too easy for them and applicable for seventh grade. The different numbers of students select the difficult or easy categories is based on their individual abilities. It may be correlate to the research by Toste et al. (2020) that there are causal connection between students' reading abilities and reading experiences because the more reading and the greater reading experience lead to better reading accomplishment.

Furthermore, interesting results from the assessment of readability by students' judgments in this study demonstrate that among reader factors, prior knowledge has the greatest impact on the textbook readability. Additionally, the study conducted by Joh & Plakans (2017) attests to this research findings. They discovered that prior knowledge affects EFL learners' ability to comprehend what they are reading and has a considerable impact on readers' working memory during reading. In addition, this research also show that vocabulary is the highest text factor. Previous research in this field by Afzal (2019) also has the same results. He stated that the biggest barriers preventing Saudi Arabian undergraduate students from understanding English textbooks is a lack of sufficient new vocabulary learning.

CONCLUSION

In brief, this study attempted to examine the readability level using Miyazaki EFL Readability Index and students' judgment of the textbook, as well as the factors that may affect readability in the Morphology textbook. In the initial outcomes, it revealed that the morphology textbook's readability score is 27.94. It can be defined that the complexity level of the text tends to be classified as very difficult category and suitable for college graduate. This leads to the notion that the textbook used by the students are more difficult for their actual level. Moreover, according to students' judgment of the textbook's readability, a majority of them as much as 68.52% or 25 students agree that it is difficult to read, while few of them as much as 31.48% or 11 students agree that the textbook is easy to read. Finally, the researcher also found the readability factors in the Morphology textbook with percentage 66.67% that is represented by two components, namely the reader factor with percentage of 22.22% and the text factor with percentage of 44.44%, which are both evaluated by 25 students who claim that the textbook is difficult for them to read. As a result, it can be inferred from these findings that the textbook is classified as having a low readability, which is consistent with students' judgment that it proved difficult for them to read the texts.

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