THE READIBILITY OF ARTICLES IN ELECTRONIC BOOK FOR SCHOOLS INDONESIAN LANGUAGE TEXTBOOK

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Abstract: The purpose of this study is to describe the readability rate of articles contained in Electronic Book for Schools (EBS), Indonesian Language textbook for High School students, The author is using Flesch Formula technique in measuring the readability of the articles, which is "RE = 206,835 – (1,015 × ASL) – (84,6 × ASW)", In The said analysis, we take two paragraphs from each article as a sample for the measurement of the readability, Based on our study, we know that the average readability of an article in Electronic Book for Schools (EBS), Indonesian Language textbook is very low, which is -15,79, The result of this research can be utilized as the basis in choosing articles or texts for reference materials in teaching Indonesian language for high school students,

Keyword: Readibility, electronic textbook for schools, Flesch Formula

Abstrak: Tujuan penelitian ini adalah untuk menggambarkan tingkat keterbacaan artikel yang terkandung dalam Buku Sekolah Elektronik (BSE), buku teks Bahasa Indonesia untuk siswa SMA, Metode yang digunakan untuk mengukur tingkat keterbacaan adalah dengan menggunakan Formula Flesch, yaitu "RE = 206,835 - (1,015 × ASL) - (84,6 × ASW)", Dalam analisis tingkat keterbacaan tersebut, kami mengambil dua paragraf dari setiap artikel sebagai sampel untuk pengukuran keterbacaan, Berdasarkan penelitian kami, dapat diketahui, bahwa rata-rata keterbacaan wacana yang terdapat dalam Buku Sekolah Elektronik (BSE) buku teks Bahasa Indonesia untuk siswa SMA sangat rendah, yaitu -15,79, Hasil penelitian ini dapat digunakan sebagai dasar dalam memilih artikel atau teks untuk bahan referensi dalam pengajaran bahasa Indonesia untuk siswa sekolah menengah,

Kata kunci: keterbacaan, buku sekolah elektronik, flesh formula

INTRODUCTION

The readibility is studied in various context, such as in education materials, newsletter report, governmental publication, military procedure, legal documents, advertisement and also academic journal, This has the purpose to ensure and enhance the understanding of the reader (Parker, Teddlie, & Chan, 1988; Dolnicar & Chapple, 2015), Readability can also be defined as the ease of understanding of the reader based on the writing style of the literature of the text (Lee, 2011), Besides, readability can also be defined as the ability of a text to identify its own content (Tarasov, Sergeev, & Filimonov, 2015), The readibility of a document is a measurement on how easy it is to read and understand a document, In order to choose the suitable reading materials for children, we will need a technique that can automatically assess a readability, (Y, Chen & Daowadung, 2015),

From the point of view of the text, a readability can also mean the easiness of understanding or comprehension of the reader towards the text, (Atesmen, 1997; Izgi & Seker, 2012), The term 'readibility' is generally used to show a level of difficulty for the reader to read and understand a text, (Saddiki, Cavalli-sforza, & Bouzoubaa, 2017),

Academician and industrial people have caught their interest in the classification of reference materials which are easy to understand through the review of certain literature of texts (Mi, Keung, Xiao, Mensah, & Gao, 2018), Readibility is an important topic for practitioner and scholars in various field and interest, including in the field of education, it is implemented in linguistic texts, science of library, business communication, medical and technical fields, (Approach, 2016), Bearing in mind on the fluency of reading, readability becomes a very important matter, in terms of the easiness to understand the text, it will significantly affect the following social and psychological activities afterwards, one of which is the spike in the interest to read among the people (Fulmer & Tulis, 2013), Besides, in relation to the learning activity, educators are also facing challenges on how to motivate students to learn, This can be very hard, particularly when the student has lack of motivation and has no interest in the learning materials or texts, (Mills, Mello, & Kopp, 2015),

Further, there is a study on the readability in the field of industry, one of which is among others, the ones did by Basch et al., (2018), The purpose of the said study is to determine the readability of skin-cancer materials from the internet, With respect to the field of medicines, the study was done by Vu & Borove, (2015), They emphasize that high quality informed consent form is very important in order to produce a sufficient exchange of information between the doctor and the patient, The clarity and the accuracy of the report is utterly important in the scientific process, (Schiffler & Thompson, 2017),

Referring to the importance of readability analysis elaborated above, various kind of articles in textbooks for teaching activity in classes will need to fulfil the readibility criteria, A sufficient readability rate will affect the level of learning effectivity, In contrast, lower or insufficient of readability rate will be resulting into ineffective learning process, since the student will have difficulty in understanding such various kind of texts,

Hence, this article has the purpose to describe on how is the rate of readability for articles comprised in the Indonesian Language textbook for high school students? This is an important matter to do, since, taking the point of view based on the cognitive development, high school students are entering the formal operational stage within their age, Therefore, they must have been already obtained a reasonable thingking in order to study reference which is relevant with their development level, one of which can be assessed through the readability rate,

METHOD

The methods used in the assessment of the readibility of the article in the electronic book for schools (EBS), Indonesian language textbook for high school, is a descriptive analytic method, it aims to examine a phenomenon in analytical, systematic, factual and meticulous manner, Through this method, we hope that this study will be able to portray readibility rate accurately,

The source of data in this study are the number of articles consisted in the electronic book for schools, Indonesian language textbook for high school, We use *Flesch Formula* technique in collecting the

data on the readibility rate in the said articles, RE = 206,835 - (1,015 × ASL) - (84,6 × ASW) (RE = Readibility rate, ASL = Average Length of Sentence, the formula is the amount of words divided by the amount of sentences, and ASW = Average amount of syllable per word, it is the amount of syllable divided by the amount of words),

The readibility rate of articles referring to several Flasch's criteria, it is (1) Scores between 90,0-100,0 which is considered as easy to understand by the 5th grader (2) Scores between 60,0-70,0 which is considered as easy to understand by the 8th and 9th grader, and (3) Scores between 0,0-30,0 which is considered as easy to understand by the graduates from higher education,

The early stage of this analysis will determine prospective articles to be analyzed, paragraph to become analysis sample, calculate the number of sentences, vocabularies, as well as amount of difficult words in the analyzed paragraph, Afterwards, we will insert them into the Flasch Formula,

RESULT AND DISCUSSION

The number of articles analyzed in this study are as much as ten articles, with the title of 1) Tips on Job Interview (*Kiat Berwawancara Kerja*), 2) Tips on Tidying Short Hair (*Kiat Menata Rambut Pendek*), 3) Tips to Keep High-Spirited on Monday (*Kiat Tetap Semangat Pada Hari Senin*), 4) *Four Tips to Refrain from Envying Others* (*Empat Tips Agar Tidak Iri Kepada Orang Lain*), 5) Ease Annoyance on Monday (*Meredakan Kejengkelan Pada Hari Senin*), 6) Tire's Characteristic Exactly in Rainy Season (*Ciri Ban Tepat Pada Musim Hujan*), 7) Mass Demonstration (*Demonstrasi Massa*), 8) Aceh's Earthquake (*Gempa Aceh*), 9) *About Japan* (*Tentang Jepang*), and 10) Sandal's Theft Case (*Kasus Mencuri Sandal*),

Here is the result of article's readability based on the analysis using the Flesch Formula,

Table 4,1: Readability Rate of Articles in the Electronic Book for Schools (EBS), Indonesian Language Textbook for 11th Grader High School Students

Type of Article	Readability Rate	Description
1	-15,79	Very hard
2	6,62	Very hard
3	-11,92	Very hard
4	-18,76	Very hard
5	-16,88	Very hard
6	0,04	Very hard
7	-32,86	Very hard
8	-17,35	Very hard
9	-25,81	Very hard
10	-25,21	Very hard
Average	**-15,79**	**Very hard**

Article 1 is comprised of 10 paragraphs, The number of sentences used as sample analysis are 12 sentences with the amount of 100 words, and 265 syllables, the average of syllables is 2,7, and the readability rate is
-15,79, considered as in very hard category, A very hard text shall be resulting into lower rate of absorbtion of the information given in the text by the students, as stated by (Atvars, 2017), lack of attention to the text literature correlates with the comprehension rate, Reading a very hard text will be resulting into lower comprehension rate of the text, (Soemer & Schiefele, 2019),

Article 2 is comprised of 5 paragraphs, From the two paragprahs made as analysis sample, there are eleven sentences, 110 vocabularies, and average syllables of 2,3, the rate of readability is as much as 6,62 (very hard, A hard text will give difficulties to the students to access information contained within, Reading a hard text will also cause distraction on other varios matters outside of the text for the students, As a result, the students will get lower and lower understanding towards the text, (Soemer & Schiefele, 2019),

Based on the data provided in the table above, we know that in order to measure the readability, the 3rd article made 8 sentences, 139 words, 341 syllables and average syllables of 2,5 as sample analysis, the readability rate of the text is -11,92 (very hard),

Further, the 4th article speaks about the procedural text, A procedural text contains of guidance in doing something, The purpose of the text is to provide easy understanding of the contents, This is made in order to ease the catching process of the main information in the text and to make it practicable as well as in accordance with te needs of the student, Besides, in case we have to request the students to make a similar text, they will be able to do the task excellently since they have already had the accurate model of procedural text, Reading comprehension is one of the most important skills for the students, they will acquire lots of academic information from a text (Kuhlemeier et al., 2014; National Center for Education Statistics, 2011; Kraal, Broek, Koornneef, & Ganushchak, 2019),

Based on the above analysis, we know that from the sample of paragraphs analysed, the readability rate of the text literature is as much as -18,76 or in the very hard category, A very hard text will surely be resulted into a low rate of students' comprehension, This is an ironic matter, bearing in mind that a procedural text is supposedly putting forward the easiness of information access for the students, The easiness to read or comprehend text will affect the spirit of the students to attend next classes, On the contrary, hard comprehension to the text will make the students have low enthusiasm to dig deeper or attend the next classes, This is in line with the statements from (Beker, Kim, Boekel, Broek, & Kendeou, 2019;Carey, 2009; Chi, 2005; Novak, 1988; Vosniadou &Brewer, 1992), that a false or hardly understood knowledge (as a result of intuition or wrong information) shall not be wanted since it will hamper the ability of the students to study a new information,

The next procedural text in the 5th article is titled as Ease Annoyance on Monday (*Meredakan Kejengkelan Pada Hari Senin*), Based on the result of analysis, the said text also has a readability rate of 16,88 (very hard to comprehend), As mentioned before, a very hard text will consequently create ineffective teachings, While we hope to have the students to find main informations through a procedural text and to have them practiced the information within their daily life,

The next procedural text or the 6th article made as teaching materials is concerning Tire's Characteristic Exactly in Rainy Season (*Ciri Ban Tepat Pada Musim Hujan*), Reviewing through the text's form, it is a procedural text which comprised of three parts, namely the elaboration on purpose, steps and affirmation, Seeing from the learning approach, this article is accurate to be used as teaching materials for students who live in the city and who get to use cars or motorcycles in their daily life, However, it might not be appropriate or outside of context if it is taught on the students who live in the village areas, or even if they live remotely in the rural areas, The students there, are oftenly travel by bicycles or some other times they travel by foot, Inaccuracy of choice among the type of articles will be resulting into a low readability rate of the relevant text, A contextual learning induces high motivation and will help the proteges to understand and apply the relevant language better (M, Chen, Wang, Zou, Lin, & Xie, 2019), Fu, Lin, Hwang, & Zhang (2019) or to have the same opinion, a contextual approach may help the students to produce a positive process of thoughts and feelings, it creates various ideas, raise exotism feeling and can express act or the intention to act, Those matters will not be realized in case we

choose irrelevant texts with the ability of the students or in the event that the text has a readability rate which is far from the capability of the students,

Further, the 7th article explains on the demonstration as well as its causality, Seeing the text from its elaboration technique, it can be considered as an exposition text, An expository text often times are harder than the narration text (Broek, Helder, Hickendor, Koornneef, & Leijenhorst, 2018; e,g., Best, Floyd, & McNamara, 2008), They have different kind of format and they require the reader to implement various strategies of reading, (Broek et al., 2018;e,g, Lorch, 2015), Choosing the Mass Demonstration (*Demonstrasi Massa*) article as a teaching material, might not cause that much of hard times for the students if it is wrapped in accordance with the right context, one of which is to align the context with the cognitive development of the students, As identified by Piaget, the cognitive development of the students is included as the entrance of formal operations stage for humanbeing, Children this age are able to form their own hypothesis and make a conclusion of possible consequences, Abstract pattern of thinking has already been developed during this age, this means that in terms of reasoning they can use pure symbols without the need of being perceptive in creating hypothesis, (Ojose, 2008)

The readability rate of the 7th article is as much as -17,35 (very hard), Information provided through the text has an important role in fostering attitude in mitigation for a disaster among the students, A text can be used to enhance situational awareness as well as to work as a two way

of communication (Sakurai & Murayama, 2019),

Further, the 9th article is a descriptive article discussing about Japan, The readability of the said article is -25,81 (very hard), Based on the two paragraphs provided as sample analysis, there are 27 vocabularies considered as difficult category in this article, The difficulty in the article will not give a good effect to the comprehension rate of the students for sure, As a consequent, the elaboration of the text will not be able to deliver the expected message in maximum to the students,

As we know that Japan has a strong culture and character of society, we can learn those points and make them as positive examples, In the modern society of Japan, they affirm and support values such as harmony, solidarity, and loyalty in the transformation process of the late Japan into a modern state of technology, (Sugihara, 2002)

The last analysis on the readability of the article is the one with the title of Sandal's Theft Case (*Kasus Mencuri Sandal*), The readability of this article is -25,21 (very hard), The low rate of the readability of the text will surely cause lower comprehension of the content of the relevant texts by the students, Therefore, the elaboration of the delivery of message in the said text will not be able to be absorbed with maximum capacity by the students, In order to be called as a fluent reader, one must be able to comprehend a written text, The minimum definition of fluency in reading should have include the definition of terms, effort, flexibility and speed of brief reading (Wallot S, 2011; Wallot, S., Hollis, G., & Marieke, v, R., 2013)

CONCLUSION AND RECOMMENDATION

Based on the findings and discussions elaborated above, we know that the tae of readability of the ten articles in electronic book for schools, Indonesian language textbook are averagely low, namely -15,79, This means that those ten articles are very

hard for high school students to comprehend,

Students have difficulty in comprehending the said texts due to the high number of vocabularies considred as hard in category, namely the use of foreign vocabularies or terms and also complex

vocabularies comprised of three or more syllables,

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