

Taqdir Volume 10 (1), 2024 p-ISSN 2527-9807|e-ISSN 2621-1157

Comparative Analysis of Readability of Arabic Books Using Fry Graphs and Fog Index

Fadhlan Rizki Ramadhan Suparman¹, Asep Sopian², Rinaldi Supriadi³ ¹²³University Education of Indonesia Email: <u>fadhlatuna@upi.edu</u>

Abstract

This study aims to compare the readability of the textbook "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Equivalent to Grade VI SD/MI)" using the Fry Graph and Fog Index. A descriptive method with a qualitative approach was used, involving content analysis based on data from the Fry Graph and Fog Index techniques. Data were collected through note-taking and literature studies, with purposive samples from three book segments (beginning, middle, and end). The Fry Graph results indicated that the book is more suitable for grades 2 to 4, not grades 6, due to its easy readability. Only the third passage matched the intended grade level, while the others could have been better. The Fog Index analysis yielded an average score of 1.9, placing it in the "Very Easy" category, failing to meet the ideal standard for grade 6. The low percentage of complex words (7%) shows that students have mastered most of the material, but the book needs to be more challenging. **Keywords:** Readability, Fry Graph, Fog Index

INTRODUCTION

By reading a book, a person will indirectly gain experience. (Sari, 2017, p. 1). Alvani in Marfuah (Furusin, 2017) revealed that in the context of education, textbooks have an essential role as teaching materials for educational purposes. Both teachers and students have their views on the quality of a textbook, whether it is good or not. A mismatch between the text and the student can hinder the student's understanding of the textbook's content. Textbooks that do not match the student's ability level can affect the quality of their learning. If the book is too difficult for the student's level of development, the student will have difficulty learning. At the same time, if the book is too easy for the student's age level, they may become lazy to learn because they feel they have mastered the material without extra effort to understand the text.

Supriadi and Fitriyani (2021, p. 2) state that the relationship between the feasibility aspects of content, language, presentation, and graphics in the field of textbook assessment, the content/material aspect is the most crucial aspect and has the largest share of 34%, compared to other elements of textbook assessment. This indicates that aspects of the material in the textbook should be given great attention since the material presented is critical to achieving the expected educational goals. Textbooks are also essential learning resources in any learning method, and they are always there to achieve the learning objectives demanded by the curriculum. One potential reason could be the inconsistency between the textbooks used by teachers and students. This issue may lead to a decline in students' interest in

reading their textbooks, which can negatively affect their motivation and the success of their learning outcomes. (Mukarromah, 2020).

Textbooks need help with their still low readability. This problem arises due to visual display mismatches, such as typeface, size, spacing between lines, paragraph width, and other visual elements. Therefore, textbooks used in the classroom must meet the eligibility standards of content, language, presentation, and graphics (Permendiknas No. 11 of 2005 article 43 paragraph 5) (Sitepu, 2015, p. 20; Wawan, 2007, p. 198). This is confirmed by Azhari (2018). The BSNP establishes the standards for textbook content suitable for educational institutions, as outlined in Article 3, Paragraph 5 of the Indonesian Minister of Education and Culture Regulation No. 8 of 2016. Textbooks must meet the aspects of material, language, presentation of material, and graphics. In addition, language factors affect the quality of textbooks, including word selection, sentence structure, paragraph preparation, and other grammatical elements (Heilman et al., 2008; Wawan, 2007). Therefore, in choosing a textbook or teaching material, a careful review, analysis, and selection process is needed to ensure that the textbook meets the desired readability criteria. A good textbook or teaching material must meet the following requirements: be easy to learn for students, use clear, complete language, be designed according to the characteristics of students, and be user-friendly (Sopian & Tatang, 2023, p. 219). The selection of textbooks has an essential role in getting an ideal and perfect textbook. However, there is a more important aspect than the ideality and perfection of textbooks, namely the ease of students understanding of the text in textbooks. If students find the text difficult, this will limit their access to information, and the objectives of teaching and learning activities will not be achieved (Andriana, 2012, p. 1). In that order, it is essential to convey the text with proper structure so that the learners can thoroughly understand the message in the text.

Previous research related to textbook analysis has been done a lot. For example, Supriadi & Fitriyani (2021), in a journal entitled "Compatibility Analysis of Arabic Textbooks based on Readability using Fog Index provisions," It was determined that this textbook's readability level, as assessed by the Fog Index formula, is elementary for Grade XI students at SMA PGII 2 Bandung to comprehend. This research was supported by Putri (2023) with the title "Readability Analysis of Arabic Book Based on Character Values," It was explained that this book is easy to read and aligns with the character values of the Pancasila student profiles, which include faith, reverence for God Almighty, noble character, global awareness, teamwork, independence, critical thinking, and creativity. In addition, Azzahra (2023), in his research entitled " How is the feasibility and readability of 10th Grade Arabic language and literature textbook?" explained that as a result of Raygor and Fog Index charts, this book is feasible to use in Class X. However, it needs adjustments to design standards, such as the selection of attractive illustrative images

Based on several previous studies that discussed the readability of books, the researchers analysed the comparative readability of Arabic books using Fry Graphs and Fog Index, which are still not widely studied and have different objects, namely the textbook "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara Kelas VI SD/MI)" which is used in the curriculum development of Madrasah Diniyah Takmiliyah Awaliyah (MDTA) 2020. This research is expected to contribute to innovation in book readability research.

This study's main contribution compares the book readability analysis using Fry Graphs and Fog Index. This is because the two methods of readability analysis complement each other. In contrast, the Fry graph analyses readability based on the suitability of a text to the intended level of education. In contrast, The Fog Index analyses readability based on the difficulty level of words in a text. This study aims to provide insight into how textbooks support Arabic language learning for Grade IV students (equivalent to Grade VI SD/MI). This research will assess the book's readability, offer opportunities for improvement, and provide recommendations for improving the design and preparation of more contextual material. This study's results will help create more effective textbooks for learning at the fourth-grade level of Madrasah Diniyah Takmiliyah Awaliyah.

THEORETICAL STUDIES

Readability

Readability refers to how well a material is matched to a specific reader based on how difficult or easy it is to understand. (Harjasujana & Mulyati, 1997). Further, Harjasujana et al. (1995) said that readability could be defined as, firstly, ease in typography or handwriting and, secondly, ease of reading, which is influenced by the attractiveness of reading materials and the level of interest in reading. Readability involves three main aspects: ease, which has to do with typography such as font size and spacing; attractiveness, which is related to reader interest and writing style; and comprehensibility, which is influenced by word or sentence length, as well as paragraph structure (Ginanjar, 2020). A text's readability can be assessed by testing or measuring the text using the readability formula (Idham & Maruti, 2023). There are several formulas for assessing text readability, such as Dale and Chall, Spache, Raygor, Fry, SMOG (Simple Measure of Gobbledgook), and Close techniques (Chaniago, Sam Mukhtar, 1996; Reni Anggraeni, 2018).

Graphic Fry

Fry's readability formula is named after its creator, Fry (1968). This formula was published in 1977 in the Journal of Reading magazine (Harjasujana & Mulyati, 1997). Fry's graph is a tool designed to simplify and improve the efficiency of readability assessments. Using graphs, Fry's formula makes it easy to assess the readability level of a text (Fatin & Yunianti, 2018). Fry's formula is the suitable method to measure the readability of a text without the need for a reader and can assess the feasibility of a text for a specific grade level in terms of readability (Fatin & Yunianti, 2018), according to (Febriana et al., 2022) The process of using Fry's graph involves several steps: (1) choosing a 100-word segment of text that represents the material, (2) tallying the number of sentences within these 100 words, (3) counting the syllables in the 100 words and multiplying this total by 0.6 to assess readability in Indonesian, and (4) The results are plotted on a Fry graph, where the vertical axis represents the number of sentences per hundred words, and the horizontal axis shows the number of sentences per hundred words.

Fog Index

The Fog Index was initially introduced by American media expert Robert Gunning in 1952. Gunning described the formula of his findings in the book The Technique of Clear Writing (Gunning, 1952). Robert Gunning researched various newspapers, magazines and other documents filled with "fog" or confusing terms, making it difficult for readers to understand (Gunning, 1952). The Fog Index is a measure that includes both aspects: vocabulary difficulty and sentence difficulty. (Fatin & Yunianti, 2018) Fog Index can predict the reading skills of teaching materials based on readers' education level (Bailin & Grafstein, 2001). Sitepu explains the process for assessing readability using The Fog Index in the following steps:(1) Select a 100-word sample from the text,(2) Determine the average sentence length by dividing the total word count by the number of sentences.", (3) Identify the number of complex words (those with three or more syllables), (4) Calculate the proportion of complex words by dividing their count by the total number of words in the sample. Then, add this value to the average sentence length. (5) Multiply the sum by 0.4. Readability scores ranging from 8 to 12 indicate that the material is complex, scores above 12 suggest the material is difficult, scores between 3 and 7 are considered easy, and scores below 3 indicate very easy material.

RESEARCH METHODS

This study uses a descriptive method that adopts a qualitative approach. This type of research describes the conditions objectively based on the data (Masyhud, 2016, p. 34). This study uses a content analysis model based on data collected through Fry's graph technique and Fog Index.

Then, it is processed by measurements or statistics to determine the degree of its readability. The data collection technique used in this study is to write notes through literature studies. The Data used in this study is a book of Arabic teaching materials entitled "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara Kelas VI SD/MI)" by Drs. H. Maman Abdul Djaliel, M.Ag. In this study, researchers used purposive sampling, which determines the sample based on special considerations. The sample was selected from three parts of the book: the beginning, the middle, and the end. (Sugiyono, 2014), which is emphasized by (Abidin, 2012) that the evaluation of the readability of a book should include three main segments of the book, namely the beginning, middle, and end.

This research analyzes a passage from an Arabic textbook titled "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara kelas VI SD/MI)." This textbook is used across MDTA institutions under the Regional Office of the Ministry of Religious Affairs of West Java Province, as specified by the decree from the head of the Regional Office of the Ministry of Religious Affairs of West Java Province Number 973 of 2020 on curriculum guidelines (Djaliel, 2021). The subject of this study is the response siswaMDTA Al Munawwar Class VI SD, located at Jln. West Cibuntu, Caringin, West Bandung District, Bandung City.

RESULTS AND DISCUSSION

Readability Through Fry's Graph Theory

In measuring the readability level of the textbook above using Fry's graph, the researchers took four samples of discourse from 7 discourses above, including Chapter 1 discourse entitled " *al-Ālāmu*", Chapter 2 discourse entitled " *'Iyādatul Marīḍi*", discourse on Chapter 4 entitled " *Ilā ḥadīqatil ḥayawāni*" discourse on Chapter 6 entitled "*Fīl Maqṣafi*" discourse on Chapter 7 entitled " *Māżā Ta'malu*" (Djaliel, 2021)

Here is a detailed explanation of each discourse that will be analyzed using Fry's graph:

a. The results of the research discourse in Chapter 1 are entitled " *al-Ālāmu*".
1) Discourse on chapter 1

ٱلآلامُ

لَمْ يَحْضُرْ يُوسُفُ فِي الْمَدْرَسَةِ أَمْسِ، لِأَنَّهُ مَرِيضٌ.عِنْدَهُ صُدَاعٌ . فَوْزِى أَيْضًا لَمْ يَحْضُرْ فِي الْمَدْرَسَةِ . هُوَ أَلَمَّ فِي الْعَظمِ وَالزُّكَامِ. يَذْهَبُ يُوسُفُ إِلَى الطَّبِيبِ مَسَاءً. سَأَلَ الطَّبِيبُ لِيُوسُفَ فِي غُرْفَةِ الْفَحْصِ : مَاذَا بِكَ ؟ فَأَجَابَ يُوسُفُ: أَنَا أَلَمَ ، أَنَا صُدَاعٌ وَحُمَّى، يَا طَبِيبُ! قَالَ الطَّبِيبُ : طَيِّب، عِنْدَكَ زُكامٌ. لِذٰلِكَ، نِمْ كَثِيْرًا وَكُلْ كَثِيْرًا وَاشْرَبْ كَثِيْرًا، وَلَا تَنْسَ يَا يُوسُفُ: إِلَى الطَّبِيبُ، هٰذَا التَّوَاءَ . وَأَمَّا فَوْزِى فَهُوَ لَا يَذْهَبُ إِلَى الطَّبِيبُ، وَكُلْ كَثِيْرًا وَاشْرَبْ كَثِيْرًا، وَلَا تَنْسَ يَا يُوسُفُ: إِلَى الطَّبِيبُ

الصَّيْدَلِيَّةِ، وَيَشْتَرِي الدَّوَاءَ فِيهَا. وَهُوَ يَشْتَرِي أُوْلْتَرَافْلُو (Bjaliel, 2021, pp. 7-8)

2) Count the number of sentences included in the 100 words in Chapter 1 discourse.

The discourse of the 1st chapter, entitled " $Al-\bar{A}l\bar{a}mu$," is sampled from Pages 7 to 8. This discourse is a text story with the title " $Al-\bar{A}l\bar{a}mu$ ". The analysis showed that this discourse consists of 101 words, 182 syllables, 11 whole sentences, and one incomplete sentence (Djaliel, 2021, pp. 7–8).

Number of sentences = number of whole sentences + number of incomplete sentences

= 11 sentences + <u>(number of words formed in 100</u> words)

The number of words in an incomplete

sentence

= 11 + (3/4) = 11.75

3) Counting the syllables included in the 100 words in the discourse of the 1st chapter

Syllable = syllable x 0.6 = 182×0.6 = 112.2

4) Applying the results of the calculation of sentences and syllables to Fry's graph

Graph 1. Results of sentence and syllable assessment of Chapter 1 discourse on fry graph



Following the theory (Fry, 1968), Fry's Graph results above show that the discourse in Chapter 1, "*al-*Alamu," with an average sentence and syllable of 100 words, is intended for Grade 1 elementary school.

b. The results of discourse research in Chapter 2 entitled *"'Iyādatul Marīḍi"*1) Discourse on Chapter 2

فِكْرِى طَالِبٌ مَاهِرٌ وَمُحِدٌ . هُوَ غَائِبٌ فِي الْمَدْرَسَةِ، لِأَنَّهُ مَرِيضٌ وَهُوَ وَجَعُ السِّنِ وَالخُمَّى أَيْضًا. فَيَذْهَبُ أَصْدِقَاؤُهُ إِلَى بَيْتِهِ بَعْدَ الرُّجُوعِ مِنَ الْمَدْرَسَةِ لِعِيَادَتِهِ. بَعْدَ ثَلَائَةِ أَيَّام فِي مَرَضِهِ ، يَذْهَبُ فِكْرِي إِلَى السَّيدِ حَلِيلٍ ، وَهُوَ طَبِيبٌ مَا هِرٌ بِبَانْدُوْنْج ، لَكِنْ قَالَ الطَّبِيبُ لِفِكْرِي لَا بَأْسَ بِكَ ، يَا فِكْرِي وَعَسَى أَنْ تَشْفِيَ بِالسُّرْعَةِ . وَهٰذِهِ عَائِشَةُ . هِيَ تِلْمِيذَةٌ مَاهِرَةٌ . هَلْ عَائِشَةُ تِلْمِيذَةٌ مُحِدَّةً ؟ نَعَمْ، هِي تِلْمِيذَةٌ مُحِدَّةً وَمَاهِرَةً أَيْضًا. غَابَتْ عَائِشَةُ . هِي تِلْمِيذَةٌ مَاهِرَةٌ . هَلْ عَائِشَةُ تِلْمِيذَة مُحِدَّةً ؟ وَالتِلْمِيذَاتِ : لِمَاذَا هِي غَائِيَةً فَأَجَبَ بَعْضٌ....(22-23)

2) Count the number of sentences included in 100 words in the discourse of the 2nd chapter

The discourse of the 2nd chapter entitled """*Iyādatul Marīḍi*" is sampled from pages 22 to 24. The classification results show that this discourse consists of 101 words, 214 syllables, 13 whole sentences, and one incomplete sentence (Djaliel, 2021, pp. 22–23).

Number of sentences = number of whole sentences + number of incomplete sentences

= 13 + (number of words formed in 100 words) The number of words in an incomplete sentence = 13 + (11/12)

3) Counting the syllables included in the 100 words in the discourse of the 2nd chapter

Syllable = syllable x 0.6 = 214×0.6

= 128,4

4) Applying the results of the calculation of sentences and syllables to the Fry's graph

Graph 2. Results of sentence and syllable assessment of Chapter 2 discourse on fry graph



Following the theory (Fry, 1968), the results of Fry's graph above show that the discourse in Chapter 2, "*'Iyādatul Marīḍi*," has an average meeting point of sentences and syllables of 100 words, indicating that it is intended for Grade 3 elementary school.

c. The results of discourse research are in Chapter 4, entitled "*llā ḥadīqatil ḥayawāni*."

1) Discourse on Chapter 4

أَنَا أَذْهَبُ إِلَى حَدِيقَةِ الحَيَوَانِ فِي يَوْمِ الْعُطْلَةِ. وَأَصِلُ إِلَيْهَا فِي السَّاعَةِ التَّاسِعَةِ وَالنِّصْفِ ، فَلَمَّا وَصَلَ إِلَى حَدِيقَةِ الحُيَوَانِ أَجْلِسُ تَحْتَ الشَّجَرَةِ الْكَبِيرَةِ. ثُمَّ أَنْظُرُ إِلَى أَنْوَاعِ الحيَوَانِ. الحَيَوَانُ كَثِيرٌ جِدًا. أَنَا أُحِبُ أَنْ أَنْظُرَ إِلَى الْفِيلِ وَاجْرَافَةِ وَالتِّمْسَاحِ وَالْأَسَدِ وَغَيْرِهَا. أَنَا أُصَلِّى الظُّهْرَ فِي الْمَسْجِدِ حَوْلَ الحُدِيقَةِ فِي السَّاعَةِ التَّانِيَةِ عَشَرَةَ وَالتِّمْسَاحِ وَالْأَسَدِ وَغَيْرِهَا. أَنَا أُصَلِّى الظُّهْرَ فِي الْمَسْجِدِ وَالْأَسَدِ وَغَيْرِهَا. أَنَا أُحِبُ أَنْ أَنْظُرَ إِلَى الْفِيلِ وَاجْرَافَةِ وَالتِّمْسَاحِ وَالْأَسَدِ وَغَيْرِهَا. أَنَا أُصَلِّى الظُّهْرَ فِي الْمَسْجِدِ حَوْلَ الْحُدِيقَةِ فِي السَّاعَةِ التَّانِيَةِ عَشَرَةَ وَالتِّمْسَاحِ وَالْأَسَدِ وَغَيْرِهَا. أَنَا أُصلِلِي الظُّهْرَ فِي الْمَسْجِدِ وَوَلَا أَنْهُ مَنْ حَدِيقَةِ فِي السَّاعَةِ التَّانِيةِ عَشَرَةَ وَالتِّمْسَاحِ وَالْأَسَدِ وَغَيْرِهَا. أَن

⁴¹ p-ISSN 2527-9807|e-ISSN 2621-1157

2) Count the number of sentences included in 100 words in the 4th chapter discourse

The fourth chapter's discourse, "*Ilā ḥadīqatil ḥayawāni*," is taken from pages 52 to 53 as a story text. This discourse comprises 81 words, 203 syllables, and nine whole sentences (Djaliel, 2021, pp. 52–53). Since the number of words is less than 100, the calculation is adapted to Fry's graphic formula (1968), which multiplies 1.25 for syllables and sentences in the 80-word category.

Number of sentences = 9 sentences x 1.25 according to Category 80 words) = 11.25

3) Counting the syllables included in the 100 words in the 4th chapter discourse

Syllable = syllable x 1.25 (corresponds to 80 words) x 0.6

= 203 x 1.25 x 0.6 = 253.75 x 0.6 = 241.25 x 0.6 = 152.25

4) After obtaining both the data, apply the results of the calculation of sentences and syllables to Fry's graph

Graph 3. Results of sentence and syllable assessment of Chapter 4 discourse on fry graph



Following the theory (Fry, 1968), the results of Fry's graph above shows that the discourse in Chapter 4, entitled "*Ilā ḥadīqatil ḥayawāni*," is appropriate for Grade 7 junior high school, based on the average sentence and syllable of the 100 words.

d. The results of the research discourse in Chapter 6 are entitled "*Fīl Maqṣafi*."
1) Discourse on Chapter 6

في الْمَقْصَفِ

يَذْهَبُ أَنْوَارٌ وَكَمَالٌ إِلَى الْمَقْصَفِ وَقْتَ الْإِسْتِرَاحَةِ. أَنْوَارٌ يَشْتَرِي القَهْوَةَ وَأَمَّا كَمَالٌ فَهُوَ يَشْتَرِي اللَّبَنَ . أَحْمَدُ أَيْضًا في الْمَقْصَفِ . هُوَ يَشْرَبُ الشَّايَ . وَأَمَّا لِسْنَا وَاتِي فَهِيَ تأْكُلُ الْمَوْزَ مَعَ سُورْيَانِي .قَالَ كَمَالٌ لِأَحْمَدَ : أَيْنَ عَائِشَةُ يَا أَحْمَدُ ؟ فَأَجَبَ أَحْمَدُ : هِيَ تَذْهَبُ إِلَى السُّوقِ لِتَشْتَرِيَ الْحُلُوَى مَعَ فَاطِمَةَ ، نَحْنُ نَأْكُلُ الْمَوْزَ وَنَشْرَبُ الشَّايَ وَاللَّبَنَ وَالْقَهْوَةَ مَعًا فِي الْمَقْصَفِ (Djaliel, 2021, pp.) 88-89)

2) Count the number of sentences included in the 100 words in the discourse of Chapter 6

Discourse on Chapter 6 entitled "Fil Magsafi". Researchers took samples on pages 88 to 89. The results of the classification of sentences are based on the number of words, words, and syllables in the discourse of the 6th chapter. Consists of 64 words of 139 syllables and nine complete sentences (Djaliel, 2021, pp. 88–89). Suppose there is a discourse below 100 words. In that case, it will be adjusted to the formula that has been determined (Fatin & Yunianti, 2018) and is included in the category of 60 words, namely by multiplying 1.67 both for syllables or for sentences, here are the calculations:

The discourse in Chapter 6 is titled "*Fīl Magsafi*" on pages 88 to 89. This chapter has 64 words, 139 syllables, and nine whole sentences from the classification results. If the discourse is less than 100 words, it is calculated by the predetermined formula Fry's graphic formula (Fry, 1968), which multiplies 1.67 for syllables and sentences. Here is the calculation:

Number of sentences = 9 sentences x 1.67 (corresponding category 80 words) = 15.03

3) Counting the syllables included in the 100 words in the discourse of the 6th chapter

Syllable = syllable x 1.67 (corresponds to 80 words) x 0.6

= 139 x 1.67 x 0.6 = 232.13 x 0.6 = 232.13 x 0.6 = 139.3

4) After getting the two data, apply the results of the calculation of sentences and syllables to the Fry graph

⁴³ Taqdir 8 (1), 2022 p-ISSN 2527-9807|e-ISSN 2621-1157



Graph 4. Results of sentence and syllable assessment of Chapter 6 discourse on fry graph

Following the theory (Fry, 1968), the results of Fry's graph above show that the discourse in Chapter 6 , *"Fīl Maqṣafi,"* is intended for the 4th grade, based on an average sentence and syllable of 100 words.

e. The results of research discourse on Chapter 7 entitled "*Māżā Ta'malu*."
1) Discourse on Chapter 7

مَاذَا تَعْمَلُ فِي الْمَسْجِدِ ؟ أُصَلِّى الْمَعْرِبَ ثُمَّ أَقْرَأُ الْقُرْآنَ . مَاذَا تَعْمَلُ فِي غُرْفَةِ الْمُذَاكَرَةِ؟ أَذَاكِرُ الدُّرُوسَ . مَاذَا تَعْمَلُ فِي الْمَدْرَسَةِ ؟ أَنَا أَتَعَلَّمُ الْعُلُومَ النَّافِعَةَ . مَاذَا يَعْمَلُ فِي الْمَسْجِدِ ؟ هُوَ يُصَلِّى الْمَعْرِبَ ثُمَّ يَقْرَأُ الْقُرْآنَ . مَاذَا يَعْمَلُ فِي غُرْفَةِ الْمُذَاكَرَةِ ؟ هُوَ يُذَاكِرُ الدُّرُوسَ. مَاذَا يَعْمَلُ فِي الْمَدْرَسَةِ ؟ هُوَ يَتَعَلَّمُ الْعُلُومَ النَّافِعَةَ. مَاذَا يَعْمَلُ فِي غُرْفَةِ الْمُذَاكَرَةِ ؟ هُوَ يُذَاكِرُ الدُّرُوسَ. مَاذَا يَعْمَلُ فِي الْمَدْرَسَةِ يَ هُوَ يَتَعَلَّمُ الْعُلُومَ النَّافِعَةَ. مَاذَا يَعْمَلُ فِي غُرْفَةِ الْمُذَاكَرَةِ ؟ هُوَ يُذَاكِرُ الدُّرُوسَ. مَاذَا يَعْمَلُ فِي الْمَدْرَسَةِ يَ هُوَ يَتَعَلَّمُ الْعُلُومَ النَّافِعَةَ. مَاذَا تَعْمَلُ عَائِشَةُ فِي غُرْفَةِ الْمُذَاكَرَةِ ؟ هُوَ يُنَاكِرُ الدُّرُوسَ. مَاذَا يَعْمَلُ فِي الْمُدْرَسَةِ فِي الْمَسْجِدِ ، يَا رَسُمَا يَنْتِي ؟ أَنَا أُصَلِّى الْمَعْرِبَ ثُمَّ أَقْرَأُ الْقُرْآنَ. نَحْنُ نُصَلِّى الْمُوْسَ. مَاذَا تَعْمَلِينَ وَى الْمَسْجِدِ ، يَا رَسُمَا يَنْتِي ؟ أَنَا أُصَلِّى الْمَعْرِبَ ثُمَ ٱقُرْآنَ. فَيْ أَنْمَالُ الللهُ وَسَ

2) Count the number of sentences included in the 100 words in the discourse of Chapter 7

In Chapter 7, titled " $M\bar{a}\dot{z}\bar{a}$ Ta'malu", researchers took samples from pages 100 to 101. This discourse is in the form of a story text with the same title. The analysis showed that

this discourse consists of 101 words, 250 syllables, 18 whole sentences, and one incomplete sentence.

Number of sentences = number of whole sentences + number of incomplete sentences

= 18 + (number of words formed in 100 words)

The number of words in an incomplete

sentence

3) Counting the syllables included in the 100 words in the discourse of the chapter 7

Syllable = syllable x 0.6 = 250×0.6 = 150

4) After obtaining both the data, apply the results of the calculation of sentences and syllables to the Fry graph

Graph 5. Results of sentence and syllable assessment of Chapter 7 discourse on fry graph

Following the theory (Fry, 1968), the results of Fry's graph above show that the discourse in Chapter 7, "*Māžā Ta'malu*," is not valid for any level of education because the average meeting point of sentences and syllables of 100 words does not meet the criteria.

f. The results of the study on the level of readability of the discourse in the Arabic textbook entitled "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara Kelas VI SD/MI)" using Fry's graph theory

Table 1. The level of readability of the discourse in the Arabic textbook entitled "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara Kelas VI SD/MI)" using Fry's graph theory

Discourse	Discourse Title	Number Of	Syllable	Graphic
to-		Sentences	length	Fry
1	ٱلْآلَامُ	11.75	112.2	1 SD
2	عِيَادَةُ الْمَرِيضِ	13.92	128.4	3 SD



3	اِلَى حَدِيقَةِ الْحَيَوَانِ	11.25	152.25	7 SMP
4	فِي الْمَقْصَفِ	15.03	139.3	4 SD
مَاذَا تَعْمَلُ 5		18.89	150	Invalid
Total		70,.84	682.15	-
Average		14.17	136.4	-

The table above shows that the average number of sentences from 5 discourses in the textbook is 14.17, while the average number of syllable lengths is 136.4(Djaliel, 2021). After obtaining both data, the last step was applied to the Fry graph

The results of the readability calculation using Fry's graph, according to Fry's Graph Theory, show that this book is suitable for Grade 2 to 4 elementary school education. However, it is more intended for Grade 3 elementary school (Fry, 1968).

Based on Fry's graph, the first discourse is appropriate for Grade 1 elementary school, the second for Grade 3 elementary school, the third for Grade 7 junior high school, and the fourth for Grade 4 elementary school. Only the third discourse matches the readability level of the book. In contrast, the fifth discourse is invalid because the calculation of sentences and syllables is undefined in Fry's (1968) graph theory.

Based on the analysis of the number of sentences, the fifth discourse has the highest number 18.89, followed by the fourth discourse



of 15.03, the second discourse of 13.92, the first discourse of 11.75, and the third discourse of 11.25. For the number of syllables, the third highest discourse is 152.25, followed by the fourth discourse 150, the second (139.3), the first (128.4), and finally, the first discourse 112.2).

From the results of the study, it can be concluded that the Madrasah textbook "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara Kelas VI SD/MI)" (2021) using Fry's graph theory (1968) shows that this book is more suitable for Grade 3 SD, not Grade 6 SD. This book is too easy for 6th-grade students to understand, so it is considered less than ideal and can make students bored quickly.

1. Readability Through Fog Index Theory

To measure the level of readability of the textbook above, the researchers used students' responsesstudents' responses. They chose some of the discourses contained in the book, which can represent other discourses, among them, Chapter 1 discourse entitled "*Al-Ālāmu*", Chapter 2 discourse entitled "*'Iyādatul Marīḍi*", discourse in Chapter 4 entitled "*Ilā ḥadīqatil ḥayawāni*" discourse on Chapter 6 entitled "*Fīl Maqṣafī*" discourse on Chapter 7 entitled "*Māżā Ta'malu*" (Djaliel, 2021). Here is a detailed explanation of each discourse that will be analyzed using the Fog Index:

- a. The results of research on discourse Chapter 1 entitled "Al-Ālāmu."
- 5) Discourse on the 1st chapter

ٱلآلامُ

لَمْ يَحْضُرْ يُوسُفُ فِي الْمَدْرَسَةِ أَمْسِ، لِأَنَّهُ مَرِيضٌ.عِنْدَهُ صُدَاعٌ . فَوْزِى أَيْضًا لَمْ يَحْضُرْ فِي الْمَدْرَسَةِ . هُوَ أَلَمَّ فِي الْعَظِمِ وَالزُّكَامِ. يَذْهَبُ يُوسُفُ إِلَى الطَّبِيبِ مَسَاءً. سَأَلَ الطَّبِيبُ لِيُوسُفَ فِي غُرْفَةِ الْفَحْصِ : مَاذَا بِكَ ؟ الْعَظمِ وَالزُّكَامِ. يَذْهَبُ يُوسُفُ إِلَى الطَّبِيبِ مَسَاءً. سَأَلَ الطَّبِيبُ لِيُوسُفَ فِي غُرْفَةِ الْفَحْصِ : مَاذَا بِكَ ؟ فَأَجَابَ يُوسُفُ: أَنَا أَلَمَ ، أَنَا صُدَاعٌ وَحُمَّى، يَا طَبِيبُ! قَالَ الطَّبِيبُ : طَيِّبْ، عِنْدَكَ رُكامٌ. لِذٰلِكَ، نِمْ كَثِيْرًا وَكُلْ كَثِيْرًا وَاشْرَبْ كَثِيْرًا، وَلَا تَنْسَ يَا يُوسُفُ: إِلَى الطَّبِيبُ، هذا الدَّوَاءَ . وَأَمَّا فَوْزِى فَهُوَ لَا يَذْهِبُ إِلَى الطَّبِيبُ، وَلَكُنْ يَثْفِي إِلِذِهُ فَقُو لَا يَنْسَ يَا يُوسُفُ: إِلَى الطَّبِيبُ

الصَّيْدَلِيَّةِ، وَيَشْتَرِي الدَّوَاءَ فِيهَا. وَهُوَ يَشْتَرِي أُوْلْتَرَافْلُو (Bjaliel, 2021, pp. 7–8)

التَّدْرِيْب

Answer the following questions using the above *Qirā'ah*.

1) Calculation of the average length of sentences in the discourse of the 1st chapter entitled "*Al-Ālāmu*"

The first discourse is the first one titled " $Al-\bar{A}l\bar{a}mu$ ". Researchers took samples on pages 7 to 8 (Djaliel, 2021). The discourse is in the form of a story

47 Taqdir 8 (1), 2022 p-ISSN 2527-9807|e-ISSN 2621-1157 text with the title" Al- $\bar{A}l\bar{a}mu$ ". It consists of 12 whole sentences with a total of 100 words. However, after using Ketentukan Gunning (1952) in The Fog Index theory, the number of words was divided into 57 words, and an average sentence length of 57: 12 = 4.75 was obtained.

2) Calculation of complex words of the students in the discourse of the 1st chapter

The next step is adding difficult words with three or more syllables, except for proper names (Septyani et al., 2020). In Chapter 1, there are ten difficult words. The percentage of challenging words is determined by dividing the number of complex words by the total word count, which 10: 57 = 0.18.

The results were obtained from 16 students of Class VI Madrasah Al-Munawwar, Cimahi, with the following details:

Table 2. The number of difficult words in the discourse of the 1st chapter, according to the sixth-grade students of Madrasah Al-Munawwar, Cimahi

Difficult words	Amount
وَ ، أَمَّا ، لَا ، تَنْسَ ، لِ ، ذَالِكَ ، أَيْضًا ، أَمْسِ	10
andيَحْضُرُ	

According to the students, the table above contains a collection of difficult words in the discourse of the first chapter. Some words already exist in the *al-Mufradāt* section, but the students do not understand them because they are similar to other words, such as \hat{x}

while writing in the dictionary begins with حَضَرَ.

Then there is also a word that already exists in the part of *al-Mufradāt*, but the students do not understand because the word is to change the form, such as نَسِيَ and تَنْسَ while writing in part *Al-Mufradāt* namely نَسِيَ . The majority of students have the equations in the selection of the words are challenging, but some problematic words are chosen by students that أَيْضًا لا مَ تَنْسَ، لَا، تَنْسَ، لِ اللَّهُ عَلَيْكَ اللَّهُ عَلَيْكُ اللَّهُ selection of the words are challenging, but some problematic words are chosen by students that أَيْضًا and أَيْضًا لا اللَّهُ عَلَيْكُ اللَّهُ اللَّهُ عَلَيْكُ اللَّهُ اللَّهُ عَلَيْكُ اللَّهُ عَلَيْكُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ عَلَيْكُ اللَّهُ عَلَيْ اللَّهُ عَلَيْكُ اللَّهُ عَلَيْكُ اللَّهُ عَلَيْكُ اللَّهُ عَلَيْكُ اللَّهُ اللَّهُ عَلَيْكُ اللَّهُ عَلَيْكُ اللَّهُ اللَّهُ عَلَيْكُ اللَّهُ عَلَيْكُ اللَّهُ اللَّهُ اللَّهُ اللَّهُ عَلَيْكُ اللَّهُ الْعُلَيْكُ اللَّهُ عَلَيْكُ الْهُ الْعُلْيْلُ اللَّهُ الْعُلْعُالِيْكُ الْعُلْعُلْيْكُ اللَّهُ عَلَيْكُ الْعُلْيْ الْعُلْيْلُ اللَّهُ عَلَيْ اللَّهُ الْعُلْيُ الْعُلْيْ اللَّهُ عَلَيْكُ اللَّهُ عَلَيْكُ الْعُلْعُ اللَّهُ عَلَيْ الْعُلْعُ الْعُلْعُ الْعُلْيُ الْعُلْعُلْيَالُ الْعُلْعُلْعُ مَالْ الْعُلْعُلْعُ الْعُلْعُ الْعُلْعُلْعُلْيَا اللَّهُ عَلَيْ الْعُلْعُ الللْعُلْعُلْعُلْعُ اللْعُلْعُلْعُلْعُلْعُلْعُلْعُ الْعُلْعُ الْعُلْعُ الْعُلْعُلْعُ الْعُلْعُلْعُلْعُ الْعُلْعُلْعُلْعُلْعُلْعُلْعُ

3) Calculation of the results of the readability of the discourse of the 1st chapter using the Fog Index formula

The next step is multiplying the average sentence length result and the percentage of complex words by 0.4. When these data are entered into the Fog Index formula (Gunning, 1952), the result will be as follows:

$$0.4\left\{\left(\frac{number\ of\ words}{number\ of\ sentences}\right) + \left(\frac{number\ of\ difficult\ words}{number\ of\ words}\right)\right\}$$

Comparative Analysis of Readability of Arabic Books Using Fry Graphs and Fog Index

$$0.4 \left\{ \left(\frac{57}{12}\right) + \left(\frac{10}{57}\right) \right\} \implies 0.4 \left\{ (4.75) + (0.17) \right\} \implies 0.4 \left\{ 4.92 \right\} \implies$$

1.96

Based on the above calculations, the final result of the readability in the discourse of the 1st chapter is 1.96. Following the determination of (Gunning, 1952) on The Fog Index theory, the level of readability of the discourse in the 1st chapter is included in the calculation of less than <3, which is included in an elementary level.

b. The results of research on discourse Chapter 2 entitled """Iyādatul Marīḍi"

عِيَادَةُ الْمَرِيض

1) Discourse on Chapter 2

فِكْرِى طَالِبٌ مَاهِرٌ وَمُحِدٌ . هُوَ غَائِبٌ فِي الْمَدْرَسَةِ، لِأَنَّهُ مَرِيضٌ وَهُوَ وَجَعُ السِّنِ وَالحُمَّى أَيْضًا. فَيَذْهَبُ أَصْدِقَاؤُهُ إِلَى بَيْتِهِ بَعْدَ الرُّجُوعِ مِنَ الْمَدْرَسَةِ لِعِيَادَتِهِ. بَعْدَ ثَلَاثَة أَيَّامٍ فِي مَرَضِهِ ، يَذْهَبُ فِكْرِي إِلَى السَّيدِ حَلِيلٍ ، وَهُوَ طَبِيبٌ مَا هِرٌ بِبَانْدُوْنْج ، لَكِنْ قَالَ الطَّبِيبُ لِفِكْرِي لَا بَأْسَ بِكَ ، يَا فِكْرِي وَعَسَى أَنْ تَشْفِيَ بِالسُّرْعَةِ . وَهٰذِهِ عَائِشَةُ . هِيَ تِلْمِيذَةً مَاهِرَةً . هَلْ عَائِشَةُ تِلْمِيذَةً مُحِدَّةً ؟ نَعَمْ، هِيَ تِلْمِيذَةً مُحِدَّةً وَمَاهِرَةً أَيْضًا. غَابَتْ عائِشَةُ . هِيَ تِلْمِيذَةً مَاهِرَةً . هَلْ عائِشَةُ تِلْمِيذَة مُحِدَّةً ؟ وَالتِّلْمِيذَاتٍ : لِمَاذَا هِيَ غَائِبَةً فَأَجَبَ بَعْضٌ....

التَّدْرِيْب

Answer the following questions using the above *Qirā'ah*.

2) Calculation of the average length of sentences in the discourse of the 2nd chapter

The second discourse in Chapter 2, entitled "'*'Iyādatul Marīḍi*" is taken from pages 22 to 23 (Djaliel, 2021). This discourse is a story text with 13 complete sentences and one incomplete sentence, totalling 101 words. Using Fry's graph formula, the average sentence length is 13.92. After calculating with Gunning's Fog Index theory

(1952), the number of words became 64, so the average sentence length was 64: 13.92 = 4.60.

3) Calculation of complex words of the students on the discourse of the 2nd chapter

The next step is to add up the difficult words in the discourse (Gunning, 1952). In the discourse of the 2nd chapter, there are two difficult words out of a total of 64 words, resulting in a percentage of complex words of 0.03.

The results were obtained from 16 students of Class VI Madrasah Al-Munawwar, Cimahi, with the following details:

Table 3. The number of difficult words in the discourse of the 2nd chapter, according to the sixth-grade students of Madrasah Al-Munawwar, Cimahi

Difficult words	Amount
بَعْدَ and نَجِّدٌ	2

According to the students, the table above contains a collection of difficult words in the discourse of the 2nd chapter. Two words are difficult according to the students بُعَدَ and بُعَدَ That is where

a word بَعْدَ is not contained in the section of *Al-Mufradāt* makes most students not know the meaning of the word. However, only a few of the students do not know the word.

From the collection of difficult words in the Chapter 2 discourse when presented, the difficult words are 3% of the total words in the Chapter 2 discourse.

4) Calculation of the results of the readability of the discourse of the 2nd chapter using the Fog Index formula

The next step is multiplying the average sentence length result and the percentage of complex words by 0.4. When the data is entered into the Fog Index formula (Gunning, 1952):

$$0.4 \left\{ \left(\frac{number \ of \ words}{number \ of \ sentences} \right) + \left(\frac{number \ of \ difficult \ words}{number \ of \ words} \right) \right\}$$

$$0.4\left\{\left(\frac{64}{13.92}\right) + \left(\frac{2}{64}\right)\right\} \implies 0.4\left\{(4,6) + (0.03)\right\} \implies 0.4\left\{4.63\right\} \implies 1.85$$

Based on calculations, the readability of the discourse in the 2nd chapter is 1.85, according to Gunning's Fog Index theory (1952), which includes an elementary level because it is less than <3.

c. The results of the research discourse in Chapter 4 entitled *"Ilā ḥadīqatil ḥayawāni"*

1) discourse on Chapter 4

أَنَا أَذْهَبُ إِلَى حَدِيقَةِ الحَيَوَانِ فِي يَوْمِ الْعُطْلَةِ. وَأَصِلُ إِلَيْهَا فِي السَّاعَةِ التَّاسِعَةِ وَالنِّصْفِ ، فَلَمَّا وَصَلَ إِلَى حَدِيقَةِ الحَيَوَانِ أَجْلِسُ تَحْتَ الشَّجَرَةِ الْكَبِيرَةِ. ثُمَّ أَنْظُرُ إِلَى أَنْوَاعِ الحَيَوَانِ. الحَيَوَانُ كَثِيرٌ جِدًا. أَنَا أُحِبُ أَنْ أَنْظُرَ إِلَى الْفِيلِ وَالجَرَافَةِ وَالتِّمْسَاحِ وَالْأَسَدِ وَغَيْرِهَا. أَنَا أُصَلِّى الظُّهُرَ فِي الْمَسْجِدِ حَوْلَ الْحَدِيقَةِ فِي السَّاعَةِ الثَّانِيَةِ عَشَرَةَ وَالتِّمْسَاحِ وَالْأَسَدِ وَغَيْرِهَا. أَنَا أُصَلِّى الظُّهْرَ فِي الْمَسْجِدِ وَوَلَنَ الْحَدِيقَةِ فِي السَّاعَةِ الثَّانِيَةِ عَشَرَةَ وَالتِّمْسَاحِ وَالْأَسَدِ وَغَيْرِهَا. أَنَا أُصَلِّى الظُّهْرَ فِي الْمَسْجِدِ وَوَلَا الْحَدِيقَةِ فِي السَّاعَةِ الثَّانِيَةِ عَشَرَةَ وَالتِّمْسَاحِ وَالْأَسَدِ وَغَيْرِهَا. أَنَا أُصَلِّى الظُ

التَّدْرِيْب

Answer the following questions using the above *Qirā'ah*.

2) Calculation of the average length of sentences in the discourse of the 4th chapter

The third discourse in the 4th chapter," $Il\bar{a} \ had\bar{a}qatil \ hayawani$," is taken from pages 52-53 (Djaliel, 2021). It consists of 9 sentences with 100 words. According to Gunning's Fog Index theory (1952), the number of words becomes 65, so the average sentence length is 65: 9 = 7.22.

3) Calculation of the difficult words of the students in the discourse of the 4th chapter

The next stage is adding difficult words to the discourse (Gunning, 1952). In Chapter 4, there are four difficult words. This result is divided by the total words, then the percentage of difficult words in the 1st chapter is 4:65 = 0.062.

The results were obtained from 16 students of Class VI Madrasah Al-Munawwar, Cimahi, with the following details:

Table 4. The number of difficult words in the discourse of the 4th chapter, according to the sixth-grade students of Madrasah Al-Munawwar, Cimahi

Difficult words	Amount
حَوْلَ ، جِدًا ، أَنْظُرَ and أُصَلِ	4

According to the students, the table above contains a collection of difficult words in the discourse of the 4th chapter. On difficult words above are the words أَصَلَ and جِدًا, أَنْظُرُ that are not part of *Al-Mufradāt* makes most students will not know the meaning of the word if the percentage of difficult words in the discourse of the 4th chapter is 6.2% of the total words.

4) Calculation of the results of the readability of the discourse of the 4th chapter using the Fog Index formula.

The next step is multiplying the average sentence length result and the percentage of complex words by 0.4 (Gunning, 1952). When the data is entered into the Fog Index formula, the result is as follows:

$$0.4 \left\{ \left(\frac{number \ of \ words}{number \ of \ sentences} \right) + \left(\frac{number \ of \ difficult \ words}{number \ of \ words} \right) \right\}$$

$$0.4\left\{\left(\frac{65}{9}\right) + \left(\frac{4}{65}\right)\right\} \implies 0.4\left\{(7.22) + (0.06)\right\} \implies 0.4\left\{7.28\right\} \implies 2.9$$

Based on the above calculation, the final result of the readability of the discourse of the 4th chapter is greater than the previous reading. Following the determination of Gunning (1952) on The Fog Index theory, the level of readability of the discourse in the 4th chapter is also still included in the calculation <3, which is included at an elementary level.

- d. The results of discourse research in Chapter 6 entitled "Fil Maqsafi"
 - 1) discourse on Chapter 6

يَذْهَبُ أَنْوَارٌ وَكَمَالٌ إِلَى الْمَقْصَفِ وَقْتَ الْإِسْتِرَاحَةِ. أَنْوَارٌ يَشْتَرِي القَهْوَةَ وَأَمَّا كَمَالٌ فَهُوَ يَشْتَرِي اللَّبَنَ . أَحْمَدُ أَيْضًا فِي الْمَقْصَفِ . هُوَ يَشْرَبُ الشَّايَ . وَأَمَّا لِسْنَا وَاتِي فَهِيَ تَأْكُلُ الْمَوْزَ مَعَ سُورْيَانِي .قَالَ كَمَالٌ لِأَحْمَدَ : أَيْنَ عَائِشَةُ يَا أَحْمَدُ ؟ فَأَجَبَ أَحْمَدُ : هِيَ تَذْهَبُ إِلَى السُّوقِ لِتَسْتَرِيَ الْخُلُوى مَعَ فَاطِمَةَ ، نَحْنُ نَأْكُلُ الْمَوْزَ وَنَشْرَبُ الشَّايَ وَاللَّبَنَ وَاللَّبَنَ وَاللَّهُ أَنْ وَالْمَوْقِ الْمَقْرَعِانِي الْحُلُوى مَعَ فَاطِمَةَ ، نَحْنُ نَأْكُلُ الْمَوْزَ وَنَشْرَبُ الشَّايَ وَاللَّبَنَ وَاللَّبَنَ

1. Answer the following questions using the above *Qirā'ah*.

١. أَيْنَ يَذْهَبُ أَنْوَارٌ وَكَمَالٌ وَقْتَ الْإِسْتَرَاحَةِ؟
 ٢. مَنْ يَشْتَرِى الْقَهْوَةَ ؟
 ٣. لِمَاذَا عَائِشَةُ تَذْهَبُ إِلَى السُّوقِ ؟
 ٤. هَلْ فَاطِمَةُ تَأْكُلُ الْمَوْزَ ؟
 ٥. مَنْ يَذْهَبُ إِلَى السُّوقِ ؟

2. Fill it with the translation in Indonesian

١. مَكْتَبَةٌ :	۲. مَكْتَبَةٌ
۲. أَرَادَ :	٧. أَرَادَ :
٣. سُوْقٌ٣	٨. سُوْقٌ :
٤. اِشْتَرَ :	٩. شَايٌ :
ه. حَلْوَى :	.۱۰ قَهْوَةٌ

3. Fill it with the right words

	۱. اِشْتَرى >< Membeli ><
	Lapang, santai >< : : >< درائح
2)	Pulang >< Calculation of the average sentence length in the discourse of the 6th chapter Senang ><

The fourth disbonkrse in the 6th chapter, entitled. "*Fil Maqiafi*," is taken from pages 88-89, in the form of a story text with 14 sentences and 100 words" (Djaliel, 2021). After using the Fog Index, the number of words became 65, with an average sentence length of 65:14 = 4.64.

3) Calculation of complex words of the students in the discourse of the 6th chapter

The next stage is to add up the difficult words in the discourse (Gunning, 1952). In Chapter 6, there are four difficult words. This result is divided by the total words, resulting in the percentage of difficult words in the 1st chapter, which is 4: 100 = 0.04.

The results were obtained from 16 students of Class VI Madrasah Al-Munawwar, Cimahi, with the following details:

Table 5. The number of difficult words in the discourse of the 6th chapter, according to the sixth-grade students of Madrasah Al-Munawwar, Cimahi

Difficult words	Amount
وَ ، آمَّا ، أَيْضًا and يَشْتَرِي	4

The table above contains a collection of difficult words in the discourse of the 6th chapter, according to the students. A word already exists in the *Al-Mufradāt* section. However, the students do not know the specific meaning because the word يَشْتَرِي means the meaning he (man) has bought, but in the *Al-Mufradāt* section, it only has the meaning of buying.

Then there are sometimes students forget the words already learned in the previous chapter, namely the word j, where the word is in the section *Al-Mufradāt* Chapter 4; there is also a word not found in the section *Al-Mufradāt* , namely the word \tilde{J} which makes most

students do not know the meaning. The last one is the word أَيْضًا,

which is the word found in the *Al-Mufradāt* section of the 3rd-grade book or at the level of 5 Elementary School, where students when asked, forget the word.

4) Calculation of the results of the readability of the discourse of the 6th chapter using the Fog Index formula

The next step is multiplying the average sentence length result and the percentage of complex words by 0.4. When the data is entered into the Formula Fog Index (1952), as follows:

$$0.4 \left\{ \left(\frac{number \ of \ words}{number \ of \ sentences} \right) + \left(\frac{number \ of \ difficult \ words}{number \ of \ words} \right) \right\}$$
$$0.4 \left\{ \left(\frac{65}{4.64} \right) + \left(\frac{4}{65} \right) \right\} \implies 0.4 \left\{ (2.17) + (0.06) \right\} \implies 0.4 \left\{ 0.13 \right\} = 0.052$$

Based on the above calculations, following The Fog Index theory (1952), the readability of the discourse of the 7th chapter is very low compared to other chapters, and the 4th chapter is also included in the straightforward category with a score of <3.

e. The results of discourse research in Chapter 7 entitled "*Māżā Ta'malu*"
1) discourse on Chapter 7

مَاذًا تَعْمَلُ ؟

مَاذَا تَعْمَلُ فِي الْمَسْجِدِ ؟ أُصَلِّى الْمَغْرِبَ ثُمَّ أَقْرَأُ الْقُرْآنَ . مَاذَا تَعْمَلُ فِي غُرْفَةِ الْمُذَاكَرَةِ؟ أَذَاكِرُ الدُّرُوسَ . مَاذَا تَعْمَلُ فِي الْمَدْرَسَةِ ؟ أَنَا أَتَعَلَّمُ الْعُلُومَ النَّافِعَةَ . مَاذَا يَعْمَلُ فِي الْمَسْجِدِ ؟ هُوَ يُصَلِّى الْمُغْرِبَ ثُمَّ يَقْرَأُ الْقُرْآنَ . مَاذَا يَعْمَلُ فِي غُرْفَةِ الْمُذَاكَرَةِ ؟ هُوَ يُذَاكِرُ الدُّرُوسَ. مَاذَا يَعْمَلُ فِي الْمَدْرَسَةِ ؟ هُوَ يَتَعَلَّمُ الْعُلُوْمَ النَّافِعَةَ. مَاذَا يَعْمَلُ فِي غُرْفَةِ الْمُذَاكَرَةِ ؟ هُوَ يُذَاكِرُ الدُّرُوسَ. مَاذَا يَعْمَلُ فِي الْمَدْرَسَةِ ؟ هُوَ يَتَعَلَّمُ الْعُلُوْمَ النَّافِعَةَ. مَاذَا تَعْمَلُ عَائِشَةُ فِي غُرْفَةِ الْمُذَاكَرَةِ ؟ هُوَ يُذَاكِرُ الدُّرُوسَ. مَاذَا يَعْمَلُ فِي الْمَدْرَسَةِ ؟ هُوَ يَتَعَلَّمُ الْعُلُوْمَ النَّافِعَةَ. مَاذَا تَعْمَلُ عَائِشَةُ فِي غُرْفَةِ الْمُذَاكَرَةِ ؟ هُوَ يُذَاكِرُ الدُّرُوسَ. مَاذَا يَعْمَلُ فِي الْمَدْرَسَةِ يَ الْمَنْعَمَا الْعُلُوْمَ النَّافِعَةَ. مَاذَا تَعْمَلُ عَائِشَةُ فِي غُرْفَةِ الْمُذَاكَرَةِ ؟ هِي تُذَاكِرُ فَي الْمَسْجِدِ ، يَا رَسْمَا يَنْتِي ؟ أَنَا أُصَلِّى الْمَعْرِبَ ثُمَّ أَقْرَأَ القُرْآنَ. نَحْنُ نُصَلِي الْمُدُرَسَة عُنْ أَنْفُرَانَ. فَنْ لَنُو لَعَنْ الْمُالا يَنْقُومَ النَّافِعَة. مَاذَا تَعْمَلُ عَائِشَة فِي غُرْفَة الْمُذَاكَرَة ؟ هُو يَتُعَمَلُ الْعُرُوسَ. مَاذَا تَعْمَلِينَ الْمُدَاكَرُوسَ. مَاذَا تَعْمَلِينَ فَنْ الْمَنْوَا لَهُو الْمُالاللَّالِي اللهُ عُذَا يَعْمَلُ عَنْ الْمُدَاكَرُوسَ فِي غُرْفَةِ الْمُنْعَلُومَ النَّافِعَة فِي الْمَدْرَسَةِ كُلَ يَوْمَ

التَّدْرِيْب

Answer the following questions using the above *Qirā'ah*.

2) Calculation of the average sentence length in the discourse of the 7th chapter

The third discourse in the 4th chapter, entitled" $M\bar{a}\dot{z}\bar{a}$ Ta'malu, "is taken from pages 100-101(Djaliel, 2021). It consists of 18 whole sentences and one incomplete sentence with 101 words. After calculating with Fry's graph, the average sentence length was 18.92. Using the Fog Index (1952), the number of words became 41, so the average sentence length was 41: 18.92 = 2.17.

3) Calculation of complex words of the students in the discourse of the 7th chapter

The next stage is to add the problematic words in the discourse of the 7th chapter, consisting of 4 difficult words. The percentage of difficult words is calculated by dividing the number of complex words by the total number of words, which is 4: 100 = 0.04.

The results were obtained from 16 students of Class VI Madrasah Al-Munawwar, Cimahi, with the following details:

Table 6. The number of difficult words in the discourse of the 7th chapter, according to the sixth-grade students of Madrasah Al-Munawwar, Cimahi

Difficult words	Amount
ڭُلْ ، يَوْمٌ ، النَّافِعَةُ and ثُمَّ	4

The table above contains a collection of difficult words in the discourse of the 1st chapter, according to the students. Some words are not included in the *Al-Mufradāt* section either in that chapter or in others. Most have not yet learned there is on the part of *al-Mufradāt*. However, there will be at the level of previous education, namely on the words \tilde{z} and \tilde{z} and \tilde{z} for words that are on

the books of class 1 or equivalent with 3 SD, whereas for the word النَّافِعَة that are on the books of the 3rd grade or the equivalent of 6 SD (Djaliel, 2021).

Each student has a different choice of difficult words. However, some words are chosen as difficult words compared to other words, namely أُمَّ , chosen by eight students and the word التَّافِعَةُ chosen by seven students, while the other words only six students. In contrast, complicated words in the seventh discourse are 6.2% of the total words.

4) Calculation of the results of the readability of the discourse of the 7th chapter using the Fog Index formula

$$0.4 \left\{ \left(\frac{number \ of \ words}{number \ of \ sentences} \right) + \left(\frac{number \ of \ difficult \ words}{number \ of \ words} \right) \right\}$$
$$0.4 \left\{ \left(\frac{41}{18.92} \right) + \left(\frac{4}{41} \right) \right\} \implies 0.4 \left\{ (2.17) + (0.98) \right\} \implies 0.4 \left\{ 2.13 \right\} \implies$$

0.85

Based on the above calculations, following The Theory Of Fog Index (1952), the readability of the discourse of the 7th chapter is very low compared to other chapters, and the discourse of the 4th chapter is also included in the elementary level with a calculation of less than <3.

5) The results of research on the level of readability of discourse in Arabic textbooks entitled "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara Kelas VI SD/MI)" using Fog Index theory

Table 7. The level of readability of the discourse in the Arabic textbook entitled "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara Kelas VI SD/MI)" using Fog Index theory

Discourse	Discourse	Average	Difficult	Fog	Categories
to-	Title	sentence	speech	Index	
		length	presentation		
1	ٱلْآلَامُ	4.75	0.17	1.96	Very easy
2	عيَادَةُ	4.60	0.03	1.85	Very easy
	الْمَرِيضِ				
3	اِلَى حَدِيقَةِ	7.22	0.06	2.9	Very easy
	الْحَيَوَانِ				
4	في الْمَقْصَفِ	4.64	0.04	0.052	Very easy
5	مَاذَا تَعْمَلُ	2.17	0.04	0.85	Very easy
Total		23.38	0.34	-	-
Average		4.68	0.07	-	-
Results		0.4 (4.68	+ 0.07) = 1.9	-	-

From the table above, it is concluded that the average number of sentences in a discourse is 4.68, and the average of complicated words is 0.07. The results of the calculation of readability using Fog Index is 0.4 (4.68 + 0.07) = 1.9, with results <3 This means this textbook is included in the "very easy" (Gunning, 1952). The percentage of difficult words from all discourses is 7%. This is because the student has mastered most of the words in the book with intensive guidance from the teacher.

The results of research on the readability of the textbook "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara Kelas VI SD/MI)" showed that the level of readability is elementary according to The Fog Index (Gunning, 1952). The order of the most difficult is the third discourse (2.9), the first discourse (1.96), the second discourse (1.85), the fifth discourse (0.85), and the fourth discourse (0.052). Based on the analysis of the length of the discourse, the order of the largest in the third discourse (7.22), the first discourse (4.75), the fourth discourse (2.17). Word difficulty analysis shows the order from easiest: second discourse, fourth and fifth discourse, third discourse, and first discourse with the most challenging words. These results show that the textbook is very easy for the reader.

According to Gunning's (1952). theory, a discourse is considered ideal if its Fog Index score is between 7 and 8. In this study, although the "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara Kelas VI SD/MI)" is easy to understand, it cannot be ascertained that the book meets the ideal student standard. The readability of books should increase according to higher levels of difficulty, and sentence length should be maintained to ensure optimal readability (Novianto et al., 2024). Septyani (2020) also stated that this book is not ideal for class VI students because the low level of difficulty can make students quickly feel bored.

CONCLUSIONS

The conclusion of this study shows that the Arabic textbook "Mari Belajar Bahasa Arab Madrasah Diniyah Takmiliyah Awaliyah untuk Kelas VI (Setara Kelas VI SD/MI)" has a very easy readability level, both according to Fry Graphs and Fog Index. From Fry's graph, the average number of sentences is 14.17 and syllables are 136.4, which shows that this book is suitable for 2nd, 3rd, and 4th-grade students (Fry, 1968), so 6th-grade students will feel bored quickly. Fog Index analysis showed an average sentence count of 4.68 and a difficult word of 0.07, with a final result of 1.9, which also confirmed the level of ease of the book. Therefore, it is important for teachers to research the level of readability of the material and adjust the presentation so that the learning process is interesting and effective.

BIBLIOGRAPHY

Abdul Djaliel, M. (2021). Mari belajar bahasa Arab (F. Ilmiyah (ed.)). Bandung,Rizqi.

- Abidin, Y. (2012). Pembelajaran membaca berbasis pendidikan karakter. Refika Aditama.
- Andriana, W. (2012). Analisis keterbacaan teks buku pelajaran kelas III SD: studi kasus untuk teks bahasa Indonesia, IPA, dan IPS. Universitas Indonesia.
- Bailin, A., & Grafstein, A. (2001). The linguistic assumptions underlying readability formulae: a critique. Language & Communication, 21, 285–301. https://doi.org/https://doi.org/10.1016/S0271-5309(01)00005-2
- Chaniago, Sam Mukhtar, D. (1996). Aspek keterpaduan dan keterbacaan wacana buku ajar bahasa Indonesia untuk kelas I SMU. Lembaga Penelitian IKIP Jakarta.
- Fatin, I., & Yunianti, S. (2018). Bahan ajar keterbacaan (Sujinah & P. C. Kartika (eds.)). UMSurabaya Publishing.
- Febriana, I., Wulandari, A. N., & Sari, Y. (2022). Keterbacaan buku teks kurikulum merdeka bahasa Indonesia kelas 7 dengan grafik Fry. Basastra, 11(2), 174–184. https://doi.org/10.24114/bss.v11i2.38197
- Fry, E. (1968). A readability formula that saves time. International Literacy Association, Vol. 11, N, 513–578. http://www.jstor.org/stable/40013635
- Ginanjar, A. A. (2020). Analisis tingkat keterbacaan teks dalam buku ajar bahasa Indonesia. Literasi : Jurnal Bahasa Dan Sastra Indonesia Serta Pembelajarannya, 4(2), 158. https://doi.org/10.25157/literasi.v4i2.4216
- Gunning, R. (1952). The technique of clear writing. In 1952. McGraw-Hill. http://www.amazon.com/technique-clear-writing-Robert-Gunning/dp/B0006ASTRK

Harjasujana, A., & Mulyati, Y. (1997). Membaca 2. Jakarta, Depdikbud,.

Harjasujana, A. S., Mulyati, Y., & Nurhayatin, N. (1995). Membaca modul 1-12. Karunika,

Univesitas Terbuka.

- Heilman, M., Thompson, K. C.-, & Eskenazi, M. (2008). An analysis of statistical models and features for reading difficulty prediction. University of Michigan. University of Michigan, 71–79. https://aclanthology.org/W08-0909.pdf
- Idham, & Maruti, E. S. (2023). Pengukuran keterbacaan teks materi ajar pada siswa sekolah menengah atas. Jurnal Pendidikan & Pengajaran (Jupe2), 1(1), 40–48. https://doi.org/10.54832/jupe2.v1i1.95
- Marfuah Furusin, D. (2017). Analisis keterbacaan wacana buku teks sejarah kebudayaan islam dengan prosedur klose dalam pembelajaran SKI kelas X di MAN yogyakarta. UIN SUNAN KALIJAGA YOGYAKARTA., 180. http://digilib.uin-suka.ac.id/id/eprint/25243
- Masyhud, S. (2016). Metode penelitian pendidikan. LPMPK.
- Mukarromah, M. (2020). Pengembangan buku tata bahasa Arab untuk mahasiswa jurusan Pendidikan Bahasa Arab di Universitas Islam Negeri Maulana Malik Ibrahim Malang. TSAQOFIYA: Jurusan Pendidikan Bahasa Arab IAIN Ponorogo, 1(2), 51–68. https://doi.org/10.21154/tsaqofiya.v2i1.15
- Novianto, S. A., Indonesia, U. P., Abdurrahman, M., Indonesia, U. P., Supriadi, R., & Indonesia, U. P. (2024). Analisis keterbacaan buku "Sabar " menggunakan teori Fog Index. 4(1), 126–143.
- Putri, T. F., Supriadi, R., & Al Farisi, M. Z. (2023). Readability analysis of arabic book based on character values. Al-Lisan, 8(1), 62–78. https://doi.org/10.30603/al.v8i1.3313
- Reni Anggraeni, A. Y. L. S. (2018). Keterbacaan buku ajar bahasa Indonesia di sekolah menengah pertama (text book readability of Indonesian language in junior high school). Jurnal Bahasa, Sastra Dan Pembelajarannya, 7(2), 293. https://doi.org/10.20527/jbsp.v7i2.4428
- Sari, V. (2017). Tingkat keterbacaan buku teks bahasa Indonesia jenjang SMP menggunakan teori Fry. Jurnal Penelitian Pendidikan Indonesia, 2(3), 1–5.
- Septyani, Endah, D., Rafli, Z., & Muliastuti., L. (2020). Keterbacaan wacana buku teks BIPA 'Sahabatku Indonesia' tingkat madya. Indonesian Language Education and Literature, 13–23. https://doi.org/https://doi.org/http:/dx.doi.org/10.24235/ileal.v6i1.5448
- Sitepu, B. . (2015). Penulisan buku teks pelajaran. In PT Remaja Rosdakarya.
- Sopian, A., & Tatang, N. N. (2023). Pengembangan bahan ajar digital di era revolusi industri 4.0 bagi guru bahasa Arab di kabupaten Subang. Jurnal Pendidikan Dan Pengabdian Masyarakat, 6(4), 2614–7947. http://dx.doi.org/10.29303/jppm.v5i3.5672
- Sugiyono. (2014). Metode penelitian bisnis. Alfabeta.
- Supriadi, R., & Fitriyani, N. (2021). Analisis kesesuaian buku teks bahasa Arab berbasis keterbacaan menggunakan ketentuan Fog Index. Arabi : Journal of Arabic Studies, 6(1), 105. https://doi.org/10.24865/ajas.v6i1.232
- Wawan, A. (2007). Tingkat keterbacaan wacana sains dengan teknik klos. Jurnal Sosioteknologi, 10(6), 196–200.

⁵⁹ Taqdir 8 (1), 2022 p-ISSN 2527-9807|e-ISSN 2621-1157