



The readability '*Sangkuriang*': asal-mula tangkuban perahu' folklore for elementary school students using gunning fog index

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Article info	Abstract
Keywords readability, Sangkuriang folklore, elementary school students, Gunning Fog Index	Folklore in Indonesia is widely available in written form on various social media platforms. One of them is included in a PDF book entitled '30 Indonesian folklore about the Origin of the Naming of a Region in Indonesia'. The first folklore in the book is entitled ' <i>Sangkuriang: Asal-Mula Tangkuban Perahu</i> '. This folklore has the potential to be taught in elementary schools. Therefore, a study of its readability is needed. This study aims to describe the readability of the ' <i>Sangkuriang: Asal-Mula Tangkuban Perahu</i> ' folklore being read by elementary school students. Library research was conducted in the 2024/2025 academic year. Data on the readability of the ' <i>Sangkuriang: Asal-Mula Tangkuban Perahu</i> ' folklore were analyzed using the gunning fog index. The research results indicate that the folklore ' <i>Sangkuriang: Asal-Mula Tangkuban Perahu</i> ' has a range of values, with the highest value of 6.60 found in paragraph 6 and the lowest value of 3.13 in paragraph 12. This number falls within the category <7.00, which corresponds to the elementary school level, indicating that the folktale is suitable for high school students to read. The implementation involves the compilers of Indonesian language textbooks in high school using this folktale text for its literary aspect.

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1. Introduction

The folklore '*Sangkuriang*' or, sometimes called the Legend of *Tangkuban Perahu*, is one of the many folklores that are already famous in the archipelago in general, in the Sundanese cultural region in particular. This folktale has been widely published in various forms, including both manual and electronic formats, such as PDF. Among the books containing the folktale '*Sangkuriang*' is a printed book, which is a collection of Indonesian folktales. The book is titled "30 Folklores about the Origin of the Naming of a Region in Indonesia." The compiler of this book ranks the Sundanese folklore first among 30 folklore titles in the Indonesian region. The folklore is titled and subtitled '*Sangkuriang: Asal Mula Tangkuban Perahu*.' In addition to *Tangkuban Perahu*, the book contains two Sundanese folktales: '*Asal Usul Situ Bagendit*' (the ninth story) and '*Asal Usul Nama Bandung*' (the eighteenth story).

The story '*Sangkuriang: Asal Mula Tangkuban Perahu*' is located on pages 1-2, 6, in Calibri size 10. The story is 1,557 words long (Rahayu, 2023). The folklore '*Sangkuriang: Asal Mula Tangkuban Perahu*' was chosen as the object of study for several reasons. First, the folklore was placed by the compiler in the first position among 30 folklore. Second, the Sundanese folktale originates from the most populous cultural area in Indonesia.

The *Sangkuriang* folklore is a monolithic learning material for Indonesians in elementary school. In addition, the *Sangkuriang* folklore also has the potential to be taught in integrated learning with Indonesian as the focus and integrated with arts and culture lessons. For lower grades, the *Sangkuriang* folklore is taught in the listening and speaking aspects. For higher grades, the *Sangkuriang* folklore is taught in addition to the listening and speaking aspects, as well as the reading and writing aspects. Learning the *Sangkuriang* folklore, whether through monolithic Indonesian learning or integrated learning, requires the use of the written text '*Sangkuriang*' to meet readability requirements. The written text '*Sangkuriang*', which has a readability value of elementary school level, makes it easy for upper-grade students to appreciate '*Sangkuriang*'. Conversely, if the written text '*Sangkuriang*' has a readability value of high school or junior high school level, it is certain that the written text '*Sangkuriang*' will be complex for upper-grade elementary school students to appreciate. Therefore, it is necessary to conduct a study on the readability of the folklore. Through the study, it will be determined whether the folklore is difficult for high school students to read. One of the measuring tools to determine the readability of written text is the Gunning Fog Index (GFI) (Harjasujana & Damaianti, 2003; Razak, 2018).

Despite the popularity of the "*Sangkuriang: Asal Mula Tangkuban Perahu*" folklore, especially in the Sundanese cultural context, there has been little to no research on its readability for elementary school students, particularly regarding the application of readability formulas such as the Gunning Fog Index (GFI). While the folklore is widely known and taught across various grade levels in Indonesia, studies assessing its readability for different educational stages, especially elementary school students, remain scarce. The research gap exists in evaluating whether the language used in the folklore is appropriate for the intended audience and how it compares to other texts of similar cultural significance.

This article contains a single problem. The formulation is how much is the readability value of the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore using the GFI? In line with the formulation of a single problem, this article also contains a single objective. The intended research objective is to describe the readability value of the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore using the GFI.

This study presents a novel approach by utilising the Gunning Fog Index (GFI) to assess the readability of the "*Sangkuriang: Asal Mula Tangkuban Perahu*" folklore. The application of the GFI to this specific folklore has not been previously conducted. By evaluating the text's readability level, this research can contribute valuable insights into whether the language is accessible for upper-grade elementary school students, offering a scientific perspective on the suitability of folklore for educational purposes. Furthermore, this study adds to the body of research that investigates the interaction between cultural content and educational suitability, particularly for younger audiences in the Indonesian context.

2. Literature Review

2.1 Readability

One of the indicators of a text's suitability as teaching material is its language suitability (Muslich, 2010). The language suitability indicator, also known as readability, measures how easy or difficult a text is to understand for the reader. The GFI formula is a readability formula that comprises the number of words in a paragraph (W), the number of sentences in a paragraph (S), and the number of complex words in a paragraph (C). The formula uses a constant number, namely 4.00 for English texts and the number 100. Based on this component, the calculation of GFI readability is based on paragraphs (Harjasujana & Damaianti, 2003; Razak, 2018). The readability analysis of the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore using GFI is based on syntactic assumptions. The assumption is that each narrative text analyzed has met the requirements of unity or coherence.

In line with the theory of language suitability, readability plays a crucial role in determining the effectiveness of a text as teaching material, particularly for young learners. The Gunning Fog Index (GFI) provides an empirical approach to evaluating the readability of a text for its intended audience, considering the complexity of sentence structure and vocabulary. By applying the GFI formula to the "*Sangkuriang: Asal-Mula Tangkuban Perahu*" folklore, the analysis can assess the text's appropriateness for elementary school students. A text that falls within an appropriate readability level is more likely to enhance comprehension and foster a deeper understanding of the content. It is important to ensure that students not only enjoy but also engage meaningfully with the folklore in their learning process. Thus, the application of the GFI to this folklore serves as a practical method to bridge the gap between cultural material and educational effectiveness, aligning the content with the cognitive and linguistic abilities of the students.

2.2 Review of relevant research

Relevant research on readability is widely found in scientific articles in online journals. Readability is not limited to folklore texts but also includes the readability of factual narrative texts, such as scientific articles in online journals. The first four relevant studies focus on the readability of literary texts, while the other four also examine the readability of factual texts. First, Balagaize & Asrori (2024) concluded that *Papuan* folklore, as categorised by the GFI, is considered easy-to-read language suitable for high-class students, similar to the language used in elementary school textbooks. Second, Doda & Sabarani (2024) concluded that the readability of the *Patahnya Gunung Daik* folklore is of a high level. Third, Erlina et al. (2023) concluded that Riau Islands folklore has a level of readability suitable for high school students. Fourth, Yatim et al. (2024) concluded that the short story entitled '*Pagar*' has a high level of readability. Fifth, Azizah & Karisma (2024) concluded that scientific articles focused on language and literature learning in online journals have a high level of readability. Sixth, Priatno & Zulfadhli (2023) concluded that the expository text contained in scientific articles in online journals has a high level of readability. Seventh, Alfalah et al. (2024) concluded that the introduction of scientific articles in online journals focused on education and learning accredited by Sinta 4-6 has a high level of readability. Eighth, Razak (2025) describes the reproduction of procedural texts on science topics based on the appropriateness of the content and language of the procedural texts for grade VII junior high school/Islamic junior high school students. In contrast to the studies mentioned above, this research specifically focuses on evaluating the readability of a cultural folklore text, "*Sangkuriang: Asal-Mula Tangkuban Perahu*," using the Gunning Fog Index (GFI), with a particular emphasis on its suitability for upper-grade elementary school students, which has not been extensively addressed in previous research on folklore readability.

3. Method

3.1 Research design

From the perspective of data presentation, this study uses a descriptive method. Through this method, the data on the readability of folklore are described concerning the formulation of the research problem. This descriptive method is commonly employed in the field of scientific research, particularly in fields related to education and learning (Bandura, 2014; Creswell, 2014; Dornyei, 2011). From the perspective of type presentation, this study uses a library method. The data on the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore were not collected in the field through sources but used secondary data, namely through the printed book '*30 Folklore: Asal-Mula Penamaan Suatu Daerah di Indonesia*' (Rohani, 2013). This method is commonly used in the field of scientific research because specific characteristics cannot be collected primarily to produce valid and reliable data (Abubakar, 2021:51; Razak, 2023; Pringga & Sujatmiko, 2021; Putra & Sujatmiko, 2021; Sukmadinata, 2012).

The research activities took place in the odd semester of 2024/2025, which included planning activities, implementation activities, and reporting activities. The planning activities consisted of 3 activities. First, planning the data sources for the folklore text '*Sangkuriang*'. This

article uses data sourced from printed books (Rohani, 2013). Second, determining the readability formula, namely the Gunning Formula Index (GFI). Third, compiling observation guidelines to obtain data. Third, compiling a checklist to validate data and the results of data analysis. All of these activities were carried out at the beginning of the time.

The implementation activities consisted of several activities. First, collecting data on the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore and second, validating folklore data using a checklist. Third, analyzing data on the ease or difficulty of the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore being read by high school students using GFI and fourth, validating data from data analysis results using a checklist.

The final activity involves reporting, which consists of two components: first, writing an article to be published in an Sinta-2-accredited online journal, and second, validating the article using a checklist.

3.2 Population and sample

The population of this study is the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore, which was analyzed for readability using GFI. This text was analysed into 22 paragraph units. All paragraphs were included as samples. In other words, this study used a total sample. Fraenkel et al. (2012), Razak (2017), and Sugiyono (2019) stated that total samples are commonly used for social research, such as narrative text readability tests.

3.3 Research instrument

The data for the folklore text '*Sangkuriang: Asal-Mula Tangkuban Perahu*' were collected using observation guidelines. This non-test instrument contains six columns: the number column, paragraph column, paragraph description column, number of words column, number of sentences column, and number of difficult words column. This instrument was written following objective and systematic procedures so that the requirements for a valid instrument in terms of content were met. Azwar (2012), Akbar (2013), Chapelle (2012), and Fulcher & Davidson (2007) stated that a research instrument is considered to have content validity if it is compiled objectively and systematically.

3.4 Validation of data and data analysis

The text data of the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore was validated internally. The instrument used was a checklist. Azwar (2013) and Razak (2020) stated that checklists are commonly used to validate data and internal data analysis results. In other words, the paragraph data filled in the observation guidelines was rechecked by the research team. If there was an input error, the data was corrected according to the original text. Other checklists were also used to validate the readability data results. The folklore '*Sangkuriang: Asal-Mula Tangkuban Perahu*' was analysed using these checklists. That GFI formula (Gunning in Razak, 2018): $GFI = 0.4 [(W/S) + 100 (C/W)]$. The notation of W represents the sum of words, the notation of S represents the sum of sentences, the notation of C represents the sum of complex words (words with five or more syllables), and the notation of 0.4 and 100 represents constant numbers.

3.5 Criteria of Readability

GFI has four criteria (Gunning in Razak, 2018). These criteria are presented in Table 1.

3.6 Synthesis of Readability

Synthesis of the results of the readability category analysis using the mode principle. Mode is a condition of qualitative or quantitative data that appears most frequently; if the same amount of data appears, the same type of data is declared as the mode (Fraenkel et al., 2012; Razak, 2015; Furqon, 2013; Sergian & Sugiarto, 2000).

Table 1. GFI criteria

No	Value range	Description of GFI criteria
1.	< 7.00	easy to read by elementary school students, especially by junior high school students, senior high school students, and college students
2.	7.00 - 10.00	easy to read by junior high school students, especially by high school students and college students, but difficult to read by elementary school students
3.	10.00 - 13.00	easy to read by senior high school students, especially by college students, but difficult to read by junior high school and elementary school students
4.	> 13.00	easy to read by college students, but difficult to read by senior high school, junior high school students, especially elementary school students

4. Results

4.1 Readability of the first 11 paragraphs

Below are presented paragraphs 1 to 11 of the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore. Finally, Table 2 presents the results of calculating the readability level of the folklore according to the GFI.

Paragraph-1

Once upon a time in Heaven. There was a God and a Goddess who made a mistake in Heaven. They had to undergo punishment on Earth. Moreover, had to do good deeds. Both of them transformed into a Pig and a Dog. The wild boar, the incarnation of a Goddess, was named *Wayung Hyang*, and the incarnation of a Dog was named *Tumang*. The wild boar had to do various good deeds in the forest. Furthermore, the dog, the incarnation of a God, served in a kingdom as a hunting dog for a King named Sungging Perbangkara (Rahayu, 2023).

Paragraph-2

One day, King *Sungging Perbangkara* was hunting in the forest on the edge of the kingdom. After hunting, King *Sumbing Perbangkara* urinated on a caring Leaf. He immediately left the caring Leaf, which contained his stagnant urine. After leaving the place, a thirsty pig came. Then drank the King's urine. Unexpectedly, *Wayung Hyang* became pregnant. It turned out that King *Sumbing Perbangkara*'s urine contained sperm that could cause *Wayung Hyang* to become pregnant (Rahayu, 2023).

Paragraph-3

Several months later, *Wayung Hyang* gave birth to a beautiful princess. She cleaned the baby's body by licking it. Then, *Wayung Hyang* immediately put the baby on a giant rock behind the bushes. Moreover, hoped that King *Sumbing Perbangkara* could find her (Rahayu, 2023).

Paragraph-4

Sumbing Perbangkara liked hunting and returned to the forest. *Sungging Perbangkara*, who was hunting deer, heard the sound of a baby crying. He looked for the source of the sound, accompanied by his dog, *Tumang*. Finally, he found the baby girl. He was shocked and took her to the palace. He raised the baby girl as his daughter and named her *Dayang Sumbi*. Time went by quickly. *Dayang Sumbi* grew into a charming princess. *Dayang Sumbi* was very good at weaving. So many men came to the palace to propose to her. However, none of their proposals were accepted (Rahayu, 2023).

Paragraph-5

Dayang Sumbi did not want any bloodshed if one of them accepted her proposal. Finally, she asked her father's permission to leave the kingdom. Initially, *Sumbing Perbangkara* did not permit it. However, he finally allowed it and the dog was taken with his daughter. The King made a hut on the edge of the forest. *Dayang Sumbi* spent her time weaving (Rahayu, 2023).

Paragraph-6

One night, when *Dayang Sumbi* was weaving, suddenly a roll of thread fell outside the hut. Because it was already night, she was afraid to take the roll of thread. Without realising it, she swore. "*Whoever takes the roll of thread for me, if it is a woman I will make her a sister, while if it is a man I will make her a husband*" (Rahayu, 2023).

Paragraph-7

Without realising it, a black male dog suddenly approached her, having been assigned by the King to accompany *Dayang Sumbi*, and brought the roll of thread. She was shocked. However, what could she say? She had sworn and had to keep her promise. "*Okay, Tumang, I have promised and I have to keep it. Even though you are a dog, I still want to be your wife.*" She said (Rahayu, 2023).

Paragraph-8

Hearing *Dayang Sumbi*'s words, the black dog turned into a very handsome young man. *Dayang Sumbi* was very surprised to see the handsome young man in front of her. "*Hey, who are you? Why are you suddenly in my hut?*" (Rahayu, 2023).

Paragraph-9

"*Sorry, princess. I am the incarnation of God.*" The young man replied—*Dayang Sumbi* and the handsome young man. Finally married, both agreed to keep their marriage a secret from King *Sungging Perbangkara*. Wherever she went, she was always accompanied by her husband,

Tumang. No one knew that *Tumang* was the incarnation of God; every full moon night, *Tumang* transformed into a handsome young man (Rahayu, 2023).

Paragraph-10

Finally, after a year, they were married. *Dayang Sumbi* gave birth to a very handsome boy. *Dayang Sumbi* finally gave him the name *Sangkuriang*. Over time, *Sangkuriang* grew into a handsome, intelligent, and diligent child, and he began to excel at archery. *Sangkuriang* liked hunting in the forest (Rahayu, 2023).

Paragraph-11

One day, *Dayang Sumbi* told *Sangkuriang* to go hunting in the forest for deer. *Dayang Sumbi* wanted to eat the deer's liver. *Sangkuriang* hoped to get the liver of a deer to give to his mother. He had been hunting all day. However, he did not get a single one. Suddenly, when he was about to go home, he saw a wild boar, *Wayung Hyang*, passing in front of him. *Sangkuriang* immediately aimed his arrow. However, *Wayung Hyang* ran very fast. *Sangkuriang* was very angry and upset and ordered *Tumang* to chase him (Rahayu, 2023).

Table 2. Results of calculating the readability value of the first eleven paragraphs according to GFI

No.	Folklore text paragraph	GFI formula elements	Score	Level
1	Paragraph-1	Sum of word (w)	98	elementary school
		Sum of sentence (s)	8	
		Complex word (c)	0	
		GFI value	4.90	
2	Paragraph-2	Sum of word (w)	74	elementary school
		Sum of sentence (s)	8	
		Complex word (c)	0	
		GFI value	3.70	
3	Paragraph-3	Sum of word (w)	44	elementary school
		Sum of sentence (s)	4	
		Complex word (c)	0	
		GFI value	4.40	
4	Paragraph-4	Sum of word (w)	105	elementary school
		Sum of sentence (s)	9	
		Complex word (c)	0	
		GFI value	4.67	
5	Paragraph-5	Sum of word (w)	64	elementary school
		Sum of sentence (s)	5	
		Complex word (c)	0	
		GFI value	5.12	
6	Paragraph-6	Sum of word (w)	66	elementary school
		Sum of sentence (s)	4	
		Complex word (c)	0	
		GFI value	6.60	

No.	Folklore text paragraph	GFI formula elements	Score	Level
7	Paragraph-7	Sum of word (w)	70	elementary school
		Sum of sentence (s)	5	
		Complex word (c)	0	
		GFI value	5.60	
8	Paragraph-8	Sum of word (w)	40	elementary school
		Sum of sentence (s)	4	
		Complex word (c)	0	
		GFI value	4.00	
9	Paragraph-9	Sum of word (w)	65	elementary school
		Sum of sentence (s)	7	
		Complex word (c)	0	
		GFI value	3.71	
10	Paragraph-10	Sum of word (w)	50	elementary school
		Sum of sentence (s)	5	
		Complex word (c)	0	
		GFI value	4.00	
11	Paragraph-11	Sum of word (w)	93	elementary school
		Sum of sentence (s)	10	
		Complex word (c)	0	
		GFI value	3.72	
	Total	Sum of word (w)	769	elementary school
		Sum of sentence (s)	69	
		Complex word (c)	0	
		GFI value	4.46	

Based on Table 2 above, paragraphs 1 to 11 of the folktale '*Sangkuriang: Asal-Mula Tangkuban Perahu*' have elementary school level GFI values because they are <7.00 . The lowest value is 3.70 for paragraph 2, and the highest value is 6.60 for paragraph 6. It means that the first 11 paragraphs are easy to read by high-class students in elementary school. Thus, these paragraphs are easy to read for junior high school students, high school students, and college students alike.

4.2 Readability of the second 11 paragraphs

Below are presented paragraphs 12 to 22 of the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore. Finally, Table 3 presents the results of calculating the readability level of the folklore according to the GFI.

Paragraph-12

"*Tumang, quickly chase the pig?*" he growled. *Tumang*, who knew that the pig he was hunting was *Wayung Hyang*. He kept quiet and did not obey *Sangkuriang's* orders. *Sangkuriang* shouted several times. However, *Tumang* still did not move. He was even more annoyed seeing *Tomang's* behavior (Rahayu, 2023).

Paragraph-13

Sangkuriang was very angry with *Tumang* and aimed his arrow at him. Accidentally, he released the arrow, and it hit *Tumang's* head. The dog died instantly. *Sangkuriang* felt afraid and guilty. Then, he took her heart. He immediately took the heart home and gave it to his mother. *Dayang Sumbi* was very happy; she thought the heart her son gave her was the heart of a deer. After cooking and eating together, *Dayang Sumbi* did not see *Tumang* and asked him, 'shouted *Dayang Sumbi* while hitting his head with a rice spoon and bleeding, the wound was scarred and could not be removed. *Sangkuriang* was very sad and left the hut (Rahayu, 2023).

Paragraph-14

Dayang Sumbi always waited for her son to come. However, he never came. She felt very sorry for hitting him and letting him leave the house. Every day, she always prayed to meet her son. God answered her prayer. She was given eternal beauty (Rahayu, 2023).

Paragraph-15

Sangkuriang walked through the forest with a wound on his head. Because he could not bear the pain, he immediately fainted. When he came to, he was surprised to see an old grandfather. "Grandpa, who? Where am I?" he asked. "Calm down, young man, I am a hermit. Grandpa found you unconscious and badly injured. You are now in my hermitage cave," he replied (Rahayu, 2023).

Paragraph-16

Slowly, the older man asked about *Sangkuriang's* origins. However, *Sangkuriang* could not remember his past, not even his name. *Ki Ageng* called him *Jaka*. *Ki Ageng* took care of *Sangkuriang* until he recovered, and taught him martial arts and supernatural powers. After several years, *Sangkuriang* studied supernatural powers and grew into a very handsome young man. With his supernatural powers, he could summon spirits (supernatural beings) (Rahayu, 2023).

Paragraph-17

One day, he went into the forest. He walked following his footsteps until he arrived at a hut on the edge of the forest. Because he felt thirsty, he dared to come to the hut to ask for a drink. Unexpectedly, the occupant of the hut was a charming girl. The beautiful girl was *Dayang Sumbi*, his mother. When he first saw the young man who came to his house, he did not think that *Jaka* was *Sangkuriang's* son. *Sangkuriang* fell in love with *Dayang Sumbi*, a charming woman. Moreover, wanted to make her his wife (Rahayu, 2023).

Paragraph-18

The next day. *Jaka* went hunting. However, before he hunted, he stopped by the hut to meet *Dayang Sumbi*. Accidentally, his headband went up a little, and *Jaka's* scar was visible. The scar was very similar to the scar his son had. *Dayang Sumbi* asked about the scar (Rahayu, 2023).

Paragraph-19

"Why is there a scar on your head, Jaka?" Dayang Sumbi asked. However, Jaka could not remember his past. He only told about his meeting with the hermit, and he was saved when he was severely injured. Hearing the story, Dayang Sumbi was very surprised. She was sure that Jaka was Sangkuriang's son. Dayang Sumbi was also very confused; she could not possibly marry her son. She tried to convince Sangkuriang that she was his mother. However, Sangkuriang did not believe what Dayang Sumbi said. Seeing her son's attitude, Dayang Sumbi was very confused. Every day, she thought about how to cancel her marriage. Finally, she found a way; she would put forward two conditions. If Sangkuriang could meet both conditions, she would marry him. However, if it failed, the marriage would be cancelled. One night, Dayang Sumbi conveyed her two conditions (Rahayu, 2023).

Paragraph-20

"If you still want to marry me, you must fulfil two conditions."

"What are your conditions, Dayang Sumbi?"

"You must make a lake and a boat. However, the lake and the boat must be finished before sunrise." He answered.

"Okay, Dayang Sumbi, I will fulfil your two conditions." Using his supernatural powers, Sangkuriang immediately summoned an army of spirits to help him. After they were ready, they began digging the ground and arranging large stones to dam the river flow. Then they cut down giant trees to make a boat (Rahayu, 2023).

Paragraph-21

In the middle of the night, Dayang Sumbi secretly watched the work of Sangkuriang and his troops. She was shocked to see the lake and the boat almost finished. Dayang Sumbi was very anxious. She immediately ran to the village to ask for help from everyone. Finally, she spread the red cloth to the east. After a while, she spread the woven cloth she had made. A reddish light appeared from the east, as if dawn was coming. The sound of a rooster crowed. The spirits saw the reddish dawn approaching and heard the rooster crowing, thinking it was morning. They ran away and left the lake and the nearly completed boat (Rahayu, 2023).

Paragraph-22

When he discovered that Dayang Sumbi had lied to him, Sangkuriang became furious. With his magical powers, he broke the dam that he and his troops had made. A massive flood occurred. Then he kicked the almost finished boat, sending it flying, and it fell face down. The boat has now transformed into a mountain known as *Tangkuban Perahu*, which translates to "an overturned boat" (Rahayu, 2023).

Table 3. Results of calculating the readability value of the second eleven paragraphs according to GFI

No.	Folklore text paragraph	GFI formula elements	Score	Level
1	Paragraph-12	Sum of word (w)	47	elementary school
		Sum of sentence (s)	6	
		Complex word (c)	0	
		GFI value	3.13	
2	Paragraph-13	Sum of word (w)	111	elementary school
		Sum of sentence (s)	9	
		Complex word (c)	0	
		GFI value	4.93	
3	Paragraph-14	Sum of word (w)	44	elementary school
		Sum of sentence (s)	5	
		Complex word (c)	0	
		GFI value	3.52	
4	Paragraph-15	Sum of word (w)	68	elementary school
		Sum of sentence (s)	6	
		Complex word (c)	0	
		GFI value	4.53	
5	Paragraph-16	Sum of word (w)	64	elementary school
		Sum of sentence (s)	6	
		Complex word (c)	0	
		GFI value	4.27	
6	Paragraph-17	Sum of word (w)	98	elementary school
		Sum of sentence (s)	8	
		Complex word (c)	0	
		GFI value	4.90	
7	Paragraph-18	Sum of word (w)	48	elementary school
		Sum of sentence (s)	6	
		Complex word (c)	0	
		GFI value	3.20	
8	Paragraph-19	Sum of word (w)	48	elementary school
		Sum of sentence (s)	6	
		Complex word (c)	0	
		GFI value	3.20	
9	Paragraph-20	Sum of word (w)	149	elementary school
		Sum of sentence (s)	14	
		Complex word (c)	0	
		GFI value	4.26	
10	Paragraph-21	Sum of word (w)	119	elementary school
		Sum of sentence (s)	9	
		Complex word (c)	0	
		GFI value	5.29	
11	Paragraph-22	Sum of word (w)	68	elementary school
		Sum of sentence (s)	5	
		Complex word (c)	0	
		GFI value	5.44	

No.	Folklore text paragraph	GFI formula elements	Score	Level
Total		Sum of word (w)	864	elementary school
		Sum of sentence (s)	80	
		Complex word (c)	0	
		GFI value	4.32	

Based on Table 3 above, paragraphs 12 to 22 of the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore have elementary school level GFI values because they are <7.00. The lowest value is 3.13 for paragraph 12, and the highest value is 5.44 for paragraph 22. It means that the second 11 paragraphs are easy to read by high-class students in elementary school. Thus, these paragraphs are easy to read for junior high school students, high school students, and college students alike.

5. Discussion

Readability analysis using GFI or similar analysis, such as Royger graphs, relies on certain assumptions. The assumption is that every narrative text analyzed meets the requirements of unity or coherence. Therefore, this type of calculation uses text size, namely the length of the text represented by the number of words. In addition, the number of sentences in the text is also calculated. Another component that must be calculated is the number of complex words in the text (words with more than five syllables). In principle, the longer the sentence in the text, the more difficult it is believed to be to understand or vice versa.

For learning focused on reading skills in the Indonesian Language subject combined with the Arts and Culture subject, the '*Sangkuriang: Asal-Mula Tangkuban Perahu*' folklore in the folklore book (Rahoni, 2013) can be used well. It is because the folktale has a readability level suitable for elementary school students. Several relevant articles (Balagaize & Asrori, 2024; Doda & Sabarani, 2024; Erlina et al., 2023; Yatim et al., 2024; Azizah & Karisma, 2024; Priatno & Zulfadhli, 2023; Alfalah et al., 2024; Razak, 2025) all concluded that the high level of text readability is associated with a higher level of education. This conclusion is the same as the conclusion of the research in this article.

There are two different aspects between this study and the relevant research: first, the aspect of text language. Relevant research utilises Indonesian text, whereas this study employs English text. Second, the aspect of the number of folklore. Relevant research utilises four stories from a collection of Papuan folklore by different authors, namely Nurhidayati (2017), Malawat (2017), Pratiwi (2017), and Prabowo (2017). The current study utilises only one folk tale. The folklore '*Sangkuriang: Asal Mula Tangkuban Perahu*' in upper elementary school classes has the potential to teach intrinsic elements. These intrinsic elements include the names of the characters, characterisation, place of the story, time of the story, morals, and themes (Damayanti, 2024; Wibowo & Abdullah, 2023; Aryani & Achmad, 2024).

6. Conclusion and Implications

The 'Sangkuriang: Asal-Mula Tangkuban Perahu' folklore contained in the book '30 Folklore: Tentang Asal-Mula Penamaan Daerah di Indonesia' is accessible to elementary school students. It is because the GFI value is between 3.13 and 5.44. This range is included in the elementary school level, namely <7.00 .

The implication of the conclusion above is that elementary school teachers can use the book for integrated learning in lower and upper grades. The focus of integrated education is the Indonesian language subject in the reading aspect, while the combined subject is the Arts and Culture subject. However, the text of the Sundanese folklore should be collected in a manual enrichment teaching module to enhance learning effectiveness. In other words, school management must have a strong desire to equip teachers with the knowledge and skills to develop practical teaching modules. For upper elementary school classes, teaching modules should be compiled using copying assignment techniques and test techniques. Therefore, the teaching module must contain blank fields for students to copy and paste paragraphs from folklore. Additionally, the teaching module page should also include practice questions for indicators of the intrinsic elements of folklore.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Ethical Declaration

All participants provided informed consent prior to their involvement in the study. They were informed about the study's purpose, procedures, and their right to withdraw at any time without consequence.

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