

The Effectiveness of Bima Local Wisdom-Based Economic Storybook to Improve Critical Thinking Skills

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Abstract-Background and Aim: Learning media can be an alternative and solution for teachers to accustom students to critical thinking from an early age. The thinking process is carried out according to the indicators of analysis through collaborative learning where the teacher pays special attention to students because at every level of comprehension problems there are bound to be difficulties. Teachers can optimize the delivery of knowledge and learning experiences from story books as a basic holistic ability for students to improve critical thinking. Purpose: to find out the learning process and the progress of improving students' critical thinking by using economic story books and the effectiveness of storybook media as a way to improve students' critical thinking. Method: The research subjects consisted of 56 students from classes VA and VB, consisting of 29 women and 27 men who took science subjects (Natural and Social Sciences) using the quasi-experimental method. There were 2 groups, namely control and experiment. There were differences in treatment, where one group gave a dual pretest and posttest design, while the other group only took pretest scores. Results: The critical thinking process that has taken place can be observed from the increase in students' understanding and motivation to learn after reading the story book, students are very interested in the form and content of the story which is manifested in the form of positive behavior in capturing economic problems around where the students live. If students have a fun learning process with interesting learning media, they will be able to improve their critical thinking skills from an early age which will have a positive impact on their character in the future. Conclusion: this research is able to improve students' critical

thinking skills according to the expectations of the Pancasila dimensions. This media received very good appreciation and interpretation from teachers and students. Storybooks still need to be supplemented by adding Bima language to the reading text so as to provide space for the development of the archipelago's mother tongue. Teachers must pay attention to the learning strategies and media used that suit students' needs so that they can improve critical thinking skills This research was able to increase students' critical thinking according to the expectations of the Pancasila dimension. This media received very good appreciation and interpretation from teachers and students. Storybooks still need to be supplemented by adding Bima language to the reading text so as to provide space for the development of the archipelago's mother tongue. Teachers must pay attention to the learning strategies and media used that suit students' needs so that they can improve critical thinking skills This research was able to increase students' critical thinking according to the expectations of the Pancasila dimension. This media received very good appreciation and interpretation from teachers and students. Story books still need to be supplemented by adding Bima language to the reading text so as to provide space for the development of the archipelago's mother tongue. Teachers must pay attention to the learning strategies and media used according to the needs of students so that they can improve critical thinking skills (Bankole-Minaflinou 2019; Sadhu, et al. 2018; Seibert 2020). Provisions: material can be developed according to local environmental and cultural needs, it is necessary to develop the archipelago's mother tongue, teachers have an active role in innovation.

Several countries assume that the development of a person's character is closely related to the process of thinking that takes place during education and social relations between people (Peterson, et al. 2016). The importance of character education to be developed in all learning materials (Lee 2001), when the teacher can provide appropriate learning materials, it can analyze the contribution of critical thinking skills and social skills in the form of student character (Hariyanto et al. 2022). The current reality is that students are only intellectually intelligent but lack ethics in ethics, this is evidence that curriculum expectations regarding character education and the educational process that occurs are not yet effective. (Lee 2001; Peterson, et al. 2016). Character is the result of internalization through the power of thought, way of acting, way of behaving and perspective according to policy (Puskur, 2010). Peterson and Logan's research results (Logan, et al. 2010; Peterson, et al. 2016) states that mindset and social interaction can affect a person's character, because critical thinking can understand and analyze problems more sharply followed by being able to solve problems well.

The purpose of this study was to investigate the effect of the effectiveness of storybook media which is used as a way to improve students' critical thinking from an early age in elementary schools in science subjects (natural and social sciences) by relating examples of problems that occur in the environment around students. We try to observe changes in critical thinking and changes in behavior every week as evidence of improving character for the better.

Method

The research subjects were 56 students with the assumption that they were fluent readers aged 9-12 years (average: 10 years). The characters were observed as initial observations and the subject criteria were the same. This type of research is a quasi-experimental. There are 2 groups, namely control and experiment. There were differences in treatment, where one group gave

a dual pretest and posttest design, while the other group only took pretest scores.

The research was conducted at SD Negeri 28 Kota Bima for the 2021-2022 academic year. The choice of location was because the school was one of three driving schools that focused on Bima's local wisdom culture. The research uses instruments that have been validated by material experts (economic learning materials and Bima local wisdom materials), learning media experts, and evaluation experts. There are 10 question items developed by Ennis and adapted to the needs of elementary school students. Question indicators are shown in table 1.

Table 1. Indicators and question items

Indicator	Sub-Indicators	Question Number
Give a simple explanation	- Analyze opinions, focus questions and identify facts and opinions.	1, 2 3, 4
Build basic skills	- Consider sources and observe the results of observations	5, 6 7, 8
Conclude	- Ability to draw conclusions	9, 10
Provide further explanation	- Analyze terms and assumptions	
Set strategy/tactics	- Convey decisions or ideas	

The scoring rubric has been validated by a team of experts in the form of analysis and numbering in order to be able to provide information to categorize students' critical thinking skills into very good, good, medium, low, very low categories.

Table 2. Critical thinking power

Score	Category
81-100	Very good
61-80	Good
41-60	Currently
21-40	Low
0-20	Very low

After reading the story book, students are given 10 test questions that will measure and provide an overview of the development of students' critical thinking skills. Each item has

a different indicator so that each student will have different abilities. The teacher's role is to provide further directions after knowing the results of the treatment.

Critical thinking ability is a mental skill that students must have in the 21st century and has been implemented since elementary school. From the results of the posttest after using economic storybook learning media, the following is the average critical thinking ability of students.

Table 3. Average students' critical thinking power

Indicator	Average (%)
Give a simple explanation	90
Build basic skills	
Conclude	80
Provide further explanation	70
Set strategy/tactics	70
	60

Based on the results of Table 3, it can be seen that students' critical thinking skills in each indicator are in the good category. The categories are really good at only providing a simple explanation at the start. The highest average student critical thinking ability with 90% in the category of giving simple explanations and the lowest average with 60% in the indicator of managing strategies/tactics.

Based on the answers to the 10 questions shown in Figure 1. Students have the highest average answer in item 2 with 90% of the students answering correctly, then students who answer incorrectly above 30% only have 1 item, namely item 10. This shows that the results obtained fall into the good category. It can be seen in the chart below.

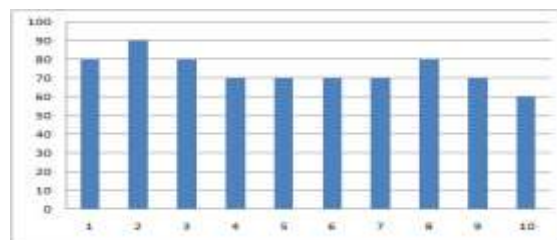


Figure 1. The average percentage of student answers

Developing critical thinking power should be done early, namely from elementary school age (Sharples et al. 2017), by carrying out a variety of learning according to the needs of students. An important component that must be owned when studying and has value is the ability to think critically (Bankole-Minaflinou 2019). Critical thinking is a mental change (Anas, Rajagukguk, and Bunawan 2020) which need to be trained and developed and become a habit from an early age (Astra 2018). For elementary school students storybooks are teaching materials that support the success of the learning process and support the literacy movement (Nuriyah, et al. 2020).

DISCUSSION

The research findings of most students show that the critical thinking process that has taken place can be observed from the increase in students' understanding and motivation to learn after reading story books, students are very interested in the form and content of stories which are manifested in the form of positive behavior in capturing economic problems in the surrounding environment. student. If students have a fun learning process with interesting learning media, they will be able to improve their critical thinking skills from an early age which will have a positive impact on their character in the future. This learning supports the independent curriculum in improving the 6 dimensions of student character. The research results are in line with Priority research results which state that there are several levels of human thinking ability (Priority et al. 2023).

Explanation of the small number of students who are lacking

Critical thinking requires motivation to learn and persistence in meeting the criteria for

learning activities. In the process there were some students who were less focused on paying attention and following instructions and had an impact on poor test results.

RECOMMENDATION

Storybooks still need to be supplemented by adding the Bima regional language to become part of the reading text so as to provide space for the development of the archipelago's mother tongue. The hope for future researchers is to be able to create other interesting economic learning media by linking local local wisdom material so that the learning process is closer to students.

CONCLUSION

There is a positive correlation between innovative story books and critical thinking from an early age. The effectiveness of using innovative learning media can continue to be developed in each region by adjusting student learning needs. Critical thinking that is instilled from an early age can become embedded in character and help solve problems when they grow up.

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