Transformation of Explanatory Text Learning into the Digital Era: Animation Media Innovation in AIKA Character Development at SDN Pondok Labu 03 Jakarta

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Abstract

Grade VI students still have difficulties in writing explanatory texts, especially in understanding the structure and content of abstract material, thus having an impact on low writing skills. This study aims to examine the influence of animation media on improving the ability to write explanatory texts and strengthening AIKA's character. This study uses a quantitative approach with a quasi-experimental design, a pretest-posttest control group design. The research sample consisted of two classes, namely the VIA class as the experimental group and the VIB class as the control group. The analysis technique used the t-test to test hypotheses and the N-Gain test to measure the improvement of writing ability and character strength. The results of the study show that animation media has a significant positive influence on improving the ability to write explanatory texts, while contributing to strengthening AIKA's values through the presentation of contextual and applicable materials. The conclusion of this study is that animation media is effective in supporting the improvement of writing skills and shaping students' character in accordance with the teachings of Al-Islam and Muhammadiyah.

Keywords: explanatory text; innovation; animation media; characters; AIKA

Introduction

Writing skills are one of the important aspects to be developed in elementary school students. One type of text that must be mastered is explanatory texts, which explain phenomena or events that occur around (Ministry of Education and Culture, 2017; Fahri, 2020). This text explains the cause-and-effect process of a natural and social phenomenon logically and systematically (Nasrillah, Kosasih, & Kurniawan, 2019; Fahri, 2020).

Based on a preliminary study at SDN Pondok Labu 03 Jakarta, it was found that students still face various challenges in writing explanatory texts, such as learning tends to be carried out monotonous and lecture-based, so that students have difficulty understanding the structure of explanatory texts in their entirety. In addition, the limitations of students' understanding of subject matter are abstract and difficult to digest without the help of interesting and interactive visual media. As a result, the explanatory text writing skills of grade VI students are relatively low and do not show significant development over time.

The phenomenon of problems that occur in the field, many students still have difficulty in understanding the concepts of explanatory texts, both in reading and writing. This phenomenon arises due to students' low mastery of explanatory texts at the elementary level, thus hindering students' ability to compose clear and well-structured writing (Sari, 2020). Research by Riyani, et.al., (2024) shows that low ability to

write explanatory texts correlates with the lack of use of innovative media in the learning process.

Along with the rapid development of technology, the use of technology-based learning media, such as animation media, has been widely adopted to improve the quality of learning in elementary schools (Widodo, 2020). Without proper media support, students often struggle to understand texts that require critical and analytical thinking skills. As a result, students have difficulty writing good and correct explanatory texts, which leads to low writing skills.

To answer the challenges of this phenomenon, digital-based learning innovations are a potential solution. This animation media can make it easier for students to understand difficult concepts, as well as improve writing skills (Fahri, 2020; Hendratmi & Sulaiman, 2021). Animation media was chosen as a learning medium because it was able to attract students' attention and visualize difficult concepts, thus helping students understand the material better (Hadi & Purnama, 2019). This animation media also presents information in a more dynamic visual way, helps students understand complex concepts, and strengthens the attraction of learning.

Basic education as the foundation for the formation of competencies and character of students must adapt to the needs of the times, especially in the integration of technology into the learning process. One important form of transformation is the use of animation media that can bridge abstract concepts into concrete, fun, and easy to understand for elementary school students (Salsabila & Noviyani, 2022). Animation media is able to increase students' interest and motivation to learn, and can strengthen students' understanding of the structure and content of explanatory texts (Fahri, 2020; Sari & Oktavia, 2023). This innovation is becoming increasingly important considering that the current generation of students is a digital-native generation that is more responsive to visual and audiovisual stimuli.

Previous studies have proven the effectiveness of various digital learning media in improving students' language skills. A study by Wulandari and Yulianto (2022) shows that the use of animation media in learning explanatory texts can significantly improve writing skills. Previous research has shown that animation media can improve students' comprehension and writing skills. Research by Widodo (2020) shows that the use of animation media can improve explanatory text writing skills in elementary school students. Research by Sari and Oktavia (2023) also emphasized that the use of animation media has proven to be effective in improving writing skills and understanding complex scientific concepts.

This research is important to be carried out because it is able to answer educational challenges in the digital era by combining interesting learning technologies, such as animation, with strengthening character education. The novelty of this research lies in the combination of animation media innovation with the strengthening of character values, namely the development of AIKA (Active, Innovative, Collaborative, and Adaptive) characters in the context of explanatory text learning. This aspect has not been touched specifically by previous research which generally only emphasizes the cognitive aspect.

This research is important because it can provide practical solutions to problems faced by teachers and students in learning explanatory texts. By integrating animation media and strengthening AIKA's character in learning explanatory texts, it is hoped that a learning model will be created that can improve students' writing skills, but also form characters that are relevant to the needs of the times. This research is also a real contribution in supporting the implementation of the Pancasila Student Profile which prioritizes literacy, technology, and character aspects in a complete unit of learning in elementary schools.

This research is based on the need to explore the effectiveness of the use of animation media in learning explanatory texts, especially in the context of strengthening the character of AIKA among grade VI students of SDN Pondok Labu 03 Jakarta. Along with the development of the Independent Curriculum which emphasizes the importance of technology-based approaches and character development, it is important to test innovations in the use of this animation media in improving students' understanding of explanatory texts while instilling deep character values. Therefore, this study aims to analyze the influence of the use of animation media on

improving the ability to write explanatory texts and strengthening the character of AIKA students in grade VI.

Method

This study uses a quantitative approach with a quasi-experimental design. This study uses *a pretest-posttest control group design*. This research was carried out to improve students' understanding of explanatory texts, as well as to develop the character of AIKA which is an important component in the competence of the Merdeka Learning curriculum.

Two classes VI were selected as samples, namely the VIA class as an experimental group that received explanatory text learning with AIKA-based animation media; and VIB classes as a control group that uses conventional learning methods. The research instrument consisted of an explanatory text writing test with indicators measuring text structure, factual content, and language (Ministry of Education and Culture, 2016; Himmah, 2020; Scott, 2019; Riyani et al., 2024); and a questionnaire on understanding AIKA's values which include trust, integrity, creativity, and adaptive (Muhammadiyah Higher Education Council, 2021; Yuanita & Saputra, 2023; Bandono, et.al., 2023).

The research procedure begins with the preparation stage, namely compiling animation-based learning tools and preparing research instruments (pretests and posters). Pretests were given to both groups to measure students' initial abilities. The next stage is the implementation of learning interventions with several meetings. The posters were given at the end of the learning to measure the improvement of the ability to write explanatory texts and AIKA's character attitudes. The results of the test are then analyzed through several stages. First, normality and homogeneity tests are used to ensure that the data meets the parametric statistical requirements. Second, *a t-test (Independent Sample T-test)* was performed to find out the significant differences between the experimental and control groups. Third, *gain score* tests and effectiveness analysis using *the N-Gain* formula were used to measure ability improvement and character enhancement before and after treatment.

Results and Discussion

Descriptive statistics are used to describe students' initial and final abilities in writing explanatory texts and strengthening AIKA's characters. The results of descriptive statistics in this study can be explained through table 1 below.

Table 1 Descriptive Statistical Results

Group	Writing Explanatory Texts		Strengthening AIKA's Character	
	Pretest	Posts	Pretest	Posts
Experiment	63,40	83,20	66,25	87,10
Control	62,80	73,60	65,90	75,35

The results in table 1 show that there was an increase in scores in both the ability to write explanatory texts and the reinforcement of AIKA scores in both groups, but a more significant increase occurred in the experimental group. The average results of the experimental group were higher than the controls, indicating an increase in explanatory text writing ability and a significant strengthening of AIKA character values. Thus, innovations in the use of animation media in learning are more effective than conventional methods.

Before testing the hypothesis, this study conducted a prerequisite test which included a normality test and a homogeneity test. The following test results of the two prerequisites can be explained in table 2 below.

Table 2 Prerequisite Test

Variable	Normality Test		Homogeneity Test
	Say. (Experiment)	*Sig.* (Control)	*Mr.* Levenes
Writing Explanatory Texts (Post)	0.131	0.115	0.226
AIKA Score (Post)	0.089	0.174	0.314

The results of the prerequisite test show that the data in this study meets the assumptions of normality and homogeneity. The significance value of the normality test for the post-explanatory text writing ability score and AIKA-based character value in both groups (experiment and control) was all above 0.05, indicating normally distributed data. Similarly, the results of the Levene test for the homogeneity test showed a significance value of 0.226 for writing ability and 0.314 for the AIKA value, which

means that the variance between groups is homogeneous. Thus, the data is worth analyzing using *a t-test*, to find out the difference between the experimental and control groups more validly.

After meeting the prerequisite test, the study continued with a hypothesis test using *an independent* samples t-test *to* determine the significant differences between the experimental and control groups. This test was applied to the results of the AIKA-based explanatory text writing and character strengthening to assess the effectiveness of animation media in learning.

Table 3 Hypothesis Test

Independent Sample t-test						
Explanatory Text Writing Skills				Strengthening Character		AIKA's
Group	Mean Posttest	t-value	Itself; (2-tailed)	Mean Posttest	t-value	Itself; (2-tailed)
Experiment	83,20	4.812	0.000	87,10	5.213	0.000
Control	73,60			75,35		

The results of the hypothesis test in table 3 show that there is a significant difference between the experimental and control groups in the ability to write explanatory texts and strengthen the character of AIKA. The experimental group showed a higher average of 0.000 significance for both variables, which means that innovation in the use of animation media has been shown to be statistically more effective than conventional methods. Thus, there is an influence of animation media on improving the ability to write explanatory texts and strengthening the character of AIKA students in grade VI Pondok Labu 03 Jakarta.

After the hypothesis test was conducted and showed a significant difference between the experimental and control groups, the next stage was to perform *the N-Gain test*. This test was used to measure how much the pretest score to the poster increased in each group, both for the ability to write explanatory texts and to strengthen AIKA's characters. The results of this test provide an overview of the level of effectiveness of the use of animation media in learning, with effectiveness categories such as high, medium, or low based on the normalized gain interpretation criteria.

Table 4 N-Gain Test

Group	Average Gain	Effectiveness Category
Experiment (Moon)	0.53	Keep
Control (Writing)	0.28	Low
Experiment (AIKA)	0.62	Tall
Control (AIKA)	0.29	Low

The results *of the N-Gain* test in Table 4 show that learning using animation media provides a more effective improvement than conventional learning. In terms of the ability to write explanatory texts, the experimental group obtained an average gain of 0.53 which was included in the medium category, while the control group only 0.28 was included in the low category. Meanwhile, in the aspect of strengthening AIKA's character, the experimental group showed an average gain of 0.62 in the high category, much higher than the control group which only reached 0.29 in the low category. These findings confirm that animation media is effective in improving writing skills and is more optimal in strengthening AIKA characters in grade VI students.

The implementation of learning in the experimental class was carried out in four meetings by integrating explanatory text material and the values of Al-Islam and Muhammadiyah (AIKA) through animation media. The theme raised was "Protecting the Environment for the Future", which is relevant to the structure of the explanatory text and strengthening the character of AIKA according to the dimensions of the Pancasila Student Profile. Learning is carried out by directing students to watch educational animations with environmental themes, then discussing the content and structure of explanatory texts and the Islamic values they contain. Next, students write explanatory texts based on the animations they watch. The process ended with a written presentation and reflection on AIKA's values that were contextually integrated and meaningful.

Learning in the control class was carried out in four meetings using conventional methods without animation media with the same topic. Teachers deliver material through lectures and textbooks. Students read sample texts, answer questions, and then write explanatory texts based on the given topic. AIKA values are conveyed orally by teachers without visual media or structured reflection, so that learning is more passive and less interactive than experimental classes.

In the research using animation media in grade VI of SDN Pondok Labu 03 Jakarta, there are several obstacles faced. Some studies also experience the same obstacles such as students' limited understanding of media, limited access to technology, limited learning time, and differences in the level of understanding between students (Sugiharto, R., & Wicaksono, 2020; Hadi & Purnama, 2019; Abdurrahman, & Mulyani, 2018). These obstacles can be solved so that they can be handled properly. The solutions in question, such as providing an introduction before animation, utilizing available technology, planning learning wisely, and using a more personalized learning approach can help overcome these obstacles (Wulandari, F., & Surya, 2018; Sugiharto, R., & Wicaksono, 2020; Abdurrahman, & Mulyani, 2018). Thus, animation-based learning can be more effective and support students in writing explanatory texts better.

The Influence of Animation Media on the Ability to Write Explanatory Texts

The results of the study show that the use of animation media in learning explanatory texts has a significant influence on students' ability to write explanatory texts. Animation media helps students to more easily understand the concepts described in explanatory texts, so that they are able to compose texts in a more structured and systematic manner. The use of animation provides a clearer visualization of ideas and information, making it easier for students to convey knowledge through writing.

Animation media can improve students' understanding of difficult concepts. Animation media is used to visualize complex processes in learning, which helps students in understanding the concepts that are the basis for writing explanatory texts (Iftanti, et.al., 2021). This is in line with Fahri's (2020) research, students who use animation media in learning show better results in compiling explanatory texts with a good and logical structure. Thus, the use of animation in learning has been shown to significantly improve students' skills in writing explanatory texts.

The results of this study support the results of research conducted by Setiawan, et.al., (2022), that the use of animation media in learning explanatory texts can improve students' understanding of the material. Likewise, Widodo's (2020) research revealed that animation media not only plays a role in understanding explanatory texts, but is also effective in improving the explanatory text writing skills of elementary school students. Animation provides an abstract explanation of concepts to be more concrete by providing a visual image that makes it easier for students to organize ideas and structure of explanatory text writing more clearly.

In a study conducted by Sari, et.al., (2021), it was found that animation media can be used to increase students' learning motivation in learning explanatory texts. Animations grab students' attention and make them more excited to study explanatory texts in more depth. Research conducted by Sukarini & Manuaba (2021) found that animation media can increase visual appeal which makes students more focused and interested in the subject matter. That way, students are more active and productive in writing explanatory texts because they can understand information faster and effectively. In addition, research by Luhulima, et.al., (2018) also shows that the use of animation media can explain complex concepts more simply, so that students can more easily grasp the core of the learning material and can write explanatory texts more precisely.

Animation media innovations have been proven to have a positive influence in improving students' understanding, creativity, motivation, and explanatory text writing skills. This fun and interactive use of media helps students connect ideas more clearly and effectively.

The Influence of Animation Media on the Strengthening of the Values of Al-Islam and Muhammadiyah (AIKA)

The use of animation media has also been proven to have an effect on strengthening the values of Al-Islam and Kemuhammadiyahan (AIKA) in students. Learning with animation media can present material that contains religious and social values in a more interesting and easy-to-understand way for students. This animation media can depict the teachings of Islam and Muhammadiyah in the daily lives of students through relevant situations.

Through narratives that contain Islamic teachings and Muhammadiyah values, animation media can provide moral messages that strengthen students' character and morals. The values taught in this animation media can be in the form of teachings about honesty, discipline, and responsibility in accordance with the principles of Islam and Muhammadiyah. Research by Yuliana and Wulandari (2018) revealed that animation media equipped with moral messages can increase students' understanding of social and religious values applied in daily life.

Animation media supports the development of writing skills and social values such as AIKA (Singh & Thomas, 2018). Through the use of stories and animations, children are more likely to express their ideas while also being exposed to the social ethics taught in education. In line with research (Lee, 2017) shows that this media also serves as a tool to teach character formation and personal values, which are important components of AIKA.

The results of this study are supported by research by Bandono, et.al., (2023) stating that the integration of religious values in technology-based learning can strengthen students' understanding of religious teachings and their application in real life. With animation, students are taught theoretically, as well as see the application of these values in a more real and visual form. In addition, research by Yuanita & Saputra (2023) added that technology-based learning, such as animation media, can make the values of Al-Islam and Kemuhammadiyahan easier to be absorbed by students and applied in their lives.

Conclusions

The use of animation media has a significant positive influence on improving the ability to write explanatory texts for grade VI students of SDN Pondok Labu 03 Jakarta. Animation media helps students in understanding learning concepts in a more engaging and effective way, which can ultimately improve the quality of students' writing. In addition, animation media also contributes to strengthening the values of Al-Islam and Kemuhammadiyahan (AIKA) by presenting relevant and applicable materials. Therefore, the use of animation media in learning in elementary school is useful for mastering academic materials and instilling religious and social values that are important for the formation of students' character. Innovation in the use of animation media to continue to be used in learning explanatory texts to improve students' writing skills and strengthen AIKA's character. Further research with a wider sample and additional variables is also needed to explore the potential of animation media in education.

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