



DEVELOPING CANVA LEARNING MEDIA TO DEVELOP THE CREATIVE THINKING SKILLS OF CLASS V STUDENTS IN MI

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Abstract

Learning media makes it easier for teachers to properly convey messages through learning materials to students and achieve learning objectives. Technological developments such as using learning media can be utilized in education. This study aims to determine the feasibility of Canva-based video media in science learning and the effect of using Canva-based video media on students' creative thinking abilities. The method used is the ADDIE Research and Development (RnD) model, which includes five stages of development: analysis, design, development, implementation, and evaluation. The research was conducted at MI Al Islamiyah Gandekan with a sample of all fifth-grade students. The methods were observation, interview, survey, and test. The research instruments used were pretest and posttest to measure students' creative thinking skills. The results of this study are as follows: (1) developing learning videos using Canva, then validated by experts and used in the learning process; The feasibility of the resulting media is in the very good category with an average score of 3.8. (2) The results of the Mann-Whitney test carried out obtained sig. (2-tailed) 0.048, which means that in this study, there was a significant difference between classes that used video animation and classes that did not use video animation on students' creative thinking abilities. The last stage of the evaluation, which produces feedback from student responses after using the video, gets an average score of 3.6, which is in the very good category.

Keywords: Canva Media, Creative Thinking, Natural Science

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INTRODUCTION

Human resources are essential to forming well-being and a decent life. In this era of Society 5.0, humans must have the skills of the 21st century. Education is the process used to create it. Indonesia has agreed to the Document Sustainable Development Goals (SDGs) with a focus on the global goal of improving the quality of education. Efforts to improve the quality of education using appropriate learning models to develop 21st-century skills (Jayadi et al., 2023). The era of Industrial Revolution 4.0 changed the technological landscape with digital virtual technology that connects humans, machines, and the data that has been released. (Anggit Grahito Wicaksono, 2020; Perdana et al., 2021).

Critical thinking, creative thinking, communication, and collaboration skills must be developed for elementary school students. Based on research at various levels of schools, both elementary to high school and tertiary institutions, students and college students do not yet have 21st-century skills. (Putri & Prodjosantoso, 2020; Putri, 2020; Putri, 2018). This skill is very important to develop in elementary school-age children because learning in elementary school is the longest education and is the basis for forming habits. Good habits that are carried out continuously will produce skills that are inherent in the individual. Creative thinking is needed by students not only to increase their learning experience but to face problems in learning. In supporting learning and to make it easier for students to receive learning well. The skills to think with the critical question is the problem and formulate appropriate hypotheses; take decisions and action steps such as designing the experiment; collect and assess information by the observations; and make conclusions. (Tiryaki, O. Caki, 2019; Putri, 2018; Ellizah et al., 2020)(Ariyani & Wangid, 2016).

Indicators of creative thinking in this research are (1) Fluency (thinking smoothly), namely, the ability to generate ideas correctly and appropriately. Students can think of more than one answer in answering questions and fluently expressing their ideas; (2) Flexibility (thinking flexibly), namely being able to solve problems using more than one method or solving problems from different points of view. Students can interpret a picture or story and provide various ways to solve a problem; (3) Originality (original thinking), the ability to give correct answers differently. Students can create unique expressions, use their language that is easy to understand, and (4) Elaboration (elaboration), the ability to detail answers correctly. Students can expand an idea or elaborate a detailed explanation.(Shalley, C. E., Zhou, J., & Oldham, 2004; Astuti et al., 2020; Priangga, 2021; Qomariyah & Subekti, 2021; Sari & Sari, 2021).

The teacher's role in building learning certainly greatly influences student development. To create students who are skilled and can compete in the current era(Kilbane, C. R. & Milman, 2014), teachers must provide appropriate learning as well. Monotonous media will make students feel bored, so teachers must use various media to keep students enthusiastic, one of which is utilizing currently developing technology.(Ardiyaningrum, Eko, 2019; Hikmah & Putri, 2017; Schrum & Levin, 2017). Learning media in SD/MI must be interesting because students

will become more enthusiastic. Thematic learning includes active, innovative, and creative learning, and there are several subjects, one of which is science. Science learning not only science as a way of knowing (Trowbridge, W. L. & Bybee, 1990). However, it also requires students to search for and find answers to a given problem. The students also like games in learning. Like the research, participants enjoyed the game because it could increase their entrepreneurial spirit, skills, insights, and mindsets.(Ahsan & Faletahan, 2021; Chiappetta, E. L. & Collate, 1994).

Traditional learning methods often fail to engage students, particularly in subjects like mathematics, where abstract concepts can be challenging to grasp. Canva-based learning media offers a solution by providing visually appealing and interactive content that can make learning more accessible and enjoyable for students (Vindo Feladi et al., 2023). The low level of critical thinking skills among students in Indonesia highlights the need for innovative educational tools. Developing learning media that incorporates technology is crucial to meet the demands of 21st-century education (Mahmud et al., 2024).

Learning media, such as Canva, can significantly enhance students' understanding and retention of material by making learning more interactive and engaging. This is particularly important for developing critical and creative thinking skills, which are essential for students to tackle complex future challenges (Hidayati et al., 2024). The use of multimedia tools in education has been shown to be effective in improving both critical and creative thinking skills, as demonstrated by the success of other interactive learning media like "Mejabando" and articulate storyline-based videos (Sandang et al., 2022; Zubaedah et al., 2024).

Prior research has predominantly concentrated on critical thinking and subject-specific skills, such as mathematics and science, using various media like games and mind mapping (Kholidah & Sari, 2023). The current study addresses the gap by specifically targeting creative thinking, which is crucial for problem-solving and innovation. While there is substantial research on learning media for vocational and higher education students, there is less focus on elementary education, particularly in fostering creative thinking skills. This study fills this gap by applying Canva-based media in a primary school setting, thus broadening the scope of educational media research (Hidayati et al., 2024).

Unlike previous studies that focus on higher education or different digital tools, this research uniquely applies Canva, a graphic design platform, to primary education. This approach is innovative as it leverages a tool primarily used for design purposes to enhance creative thinking in young students (Cai, 2021). While other studies have explored creative thinking in older students or through different methodologies, this research specifically targets Class V students, addressing a less-explored demographic in creative thinking research (Zhou, 2021).

Learning media is a tool that helps convey messages that can stimulate thoughts, motivation, and feelings and encourage interaction or communication between teachers and students.(Fauziah & Putri, 2019). One use of technological media is Canva. The Canva application is a tool that helps design learning materials anytime and anywhere. It has animation,

template, and page numbering features that can encourage creativity and time efficiency. (Farida Rahmawati Idam Ragil Widiyanto Atmojo, 2021; K. Habib, E. E. T. Kai, M. H. M. Saad, A. Hussain, 2021). The use of video media can help conceptualize material in science lessons. (Wahyuni et al., 2023; Hasnawati, 2023). Canva is a design platform for social media graphics, presentations, posters, documents, etc. The Canva application is an online-based, free, and paid application that is easy to design. The features of Canva can be developed as creatively as possible to make learning easier and more enjoyable. The problem in this research is how to create Canva-based video media in class V science learning at MI Al Islamiyah Gandekan. And is there an influence of Canva-based video media in developing students' creative thinking abilities? This research is important to provide understanding to researchers and the general public, assist teachers in conveying learning, and provide interesting learning experiences for students.

METHODS

The research method used is research and development with the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The ADDIE model can be adapted to development needs and used online or face-to-face learning. The trial design used a quasi-experimental nonequivalent control group pre-posttest design. (Sugiyono, 2017). The research was conducted at MI Al Islamiyah Gandekan with samples from classes VA and VB. The experimental class sample used Canva video learning media, and the control class used conventional learning media. Data collection was carried out by distributing ten pretest and posttest questions. Instrument development was performed with expert validation based on the creative thinking indicators that had been prepared, namely fluency, flexibility, originality, and elaboration.

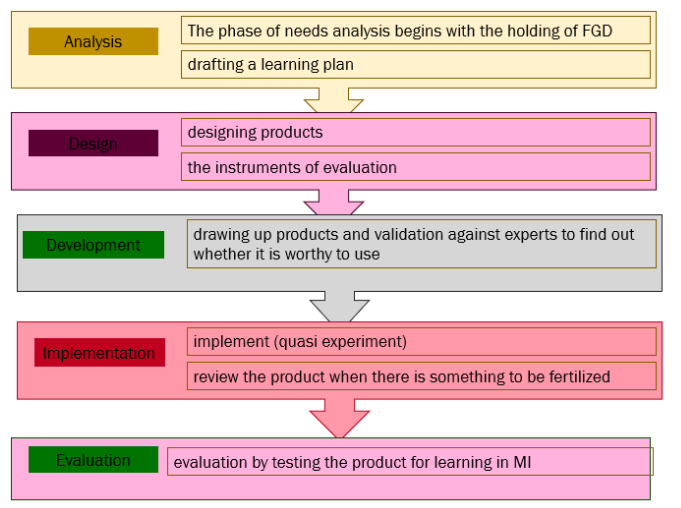


Figure 1. ADDIE Model Stages (Branch, 2009)

RESULTS AND DISCUSSION

The results of the initial analysis show that the need for learning is the learning media used in learning, followed by the characteristics of students who like learning interspersed with quizzes/games. Media validation is carried out after the media development process is complete, and a product in the form of a Canva-based learning video is produced to see the product's feasibility. Validation results from media experts and class teachers show whether the media is suitable for use in learning.

Expert judgment: media experts assess the suitability of the product being developed for later use in learning. Validation is measured using a Likert scale of 4, as described in the previous chapter. The results of the assessments that have been carried out show an average score of 4 and are included in the very feasible category.

The media developed also underwent a validation stage by the class teacher to see whether the video was suitable for use and appropriate to the MI situation. The assessment results by the VA and VB class teachers obtained an average score of 3.8 and were included in the very suitable category.

The research began with preparing an instrument, which was then validated. To test the instrument's validity, the first step is to validate it with expert judges (media experts and material experts) to see whether the instrument is by the research objectives and indicators. After revising the validation results, the instrument was validated again with class V teachers from MI Al Islamiyah Gandekan. The results of the teacher validation were then revised, and the questions were analyzed using several tests, namely validity and reliability tests, so that the questions tested in both classes could be used in several tests and still have the same results if tested repeatedly on the same subjects and conditions. Next, a test of different levels of difficulty and power was carried out. This test was carried out with the help of the SPSS application. The instruments used for research are previously validated first; the aim is to see whether the instrument can measure what it wants to measure. Validity testing uses expert opinions. The validity test of the questions is obtained by correlating the values obtained with the total score. The validity of the questions was measured using SPSS.

Expert judgment by material experts validates or assesses whether the material used is appropriate and can be delivered to students. The validation results obtained an average score of 3.2, included in the feasible category. Besides material experts, teachers also validate whether the material in the video is the material in the book and is good for learning. The results of teacher validation obtained an average score of 3.8, which means the material is included in the very appropriate category. The question's difficulty level aims to determine how difficult the question is. This difficulty level test aims to see how difficult the questions given to students are. The difficulty level test was carried out with the help of the Microsoft Excel program. Differentiating the questions is done to see whether the questions are good or not to be used. The differentiating power of this instrument ranges from 0.00 to 1.00 using Microsoft Excel.

An instrument is said to be reliable if the instrument can be used to measure objects with the same results—reliability testing using SPSS using Cronbach's Alpha formula. The following are the results of the reliability output using SPSS.

The Cronbach Alpha reliability test measurement results can be seen in the Cronbach Alpha column, namely 0.687, with N indicating the number of questions input. So, the Cronbach Alpha result obtained for 11 questions was 0.687. The calculated r value was determined, namely 5% for N 11, which was 0.602, which means $0.687 > 0.602$, so the data is reliable. The descriptive analysis obtained from two classes, namely experimental using media and control class using conventional media, produces data on minimum, maximum, average, standard deviation, and variance values. Below is a descriptive statistical analysis of student pre-test and post-test scores in the experimental and control classes.

Table 1. Data Results

Class	N	Minimum	Maksimum	Mean	Std.Devition
Pre-test Experiment	16	6	26	19.12	5.402
Post-test Experiment	16	8	34	26.44	6.418
Pre-test Control	14	10	36	23.21	6.841
Post-test Control	14	25	38	30.57	4.237

Based on Table 1, the difference in the average learning outcomes of the experimental and control classes can be seen. To see the difference, the experimental class students' learning outcomes in the post-test obtained an average of 26.44 and the control class 30.57. The next analysis is a normality test on the pre-test and post-test scores using SPSS with a significance level 0.05 with the Kolmogorov Smirnov test using SPSS.

The condition of whether the data is normally distributed or not is seen from the sig value. > 0.05 (5%), then the distribution and the sig value are normal. The sig value can be seen. The experimental post-test was 0.27, so the data was not normally distributed because of the sig value. < 0.05 . The analysis carried out after the normality test is a homogeneous test to see whether the sample is homogeneous, with the criterion of significance value (Sig.) Based on the mean > 0.05 , the data is homogeneous if the significance value (Sig.) Based on Mean $< 0,05$, then it is not homogeneous. The analysis results show that the value (Sig.) Based on Mean is 0.413, which means the data is homogeneous.

Data analysis was measured using the Mann-Whitney test because it was known that the data was not normally distributed. The Mann-Whitney test is a non-parametric test where the data does not have to be normally distributed. This test is an alternative to the Independent t-test to see whether the hypothesis H_0 or H_1 is accepted or rejected based on the Asymp value testing criteria. Sig (2-tailed) < 0.05 , then it is declared that H_1 is accepted. Meanwhile, if the value of Asymp. Sig (2-tailed) > 0.05 , and then H_0 is accepted.

The output shows the Asymp value. Sig (2-tailed) is 0.048. Based on the decision-making criteria, namely if the sig value. (2-tailed) > 0.05 , then H_0 is accepted, and H_1 is rejected.

If the sig value. (2-tailed) < 0.05 , then H_0 is rejected, and H_1 is accepted. So $0.048 < 0.05$, so it can be concluded that the hypothesis is accepted. This means there are differences in the creative thinking abilities of class V students regarding the objects around us. Hence, the use of Canva learning media influences the development of students' creative thinking abilities.

This research produces a product in the form of video learning media created with the help of the Canva application using the ADDIE development model, namely analysis, design, development, implementation, and evaluation. The analysis results show that the need for learning is learning media to help the learning process, and the characteristics of students who like learning with games or quizzes are included. As well as how the learning process occurs in the classroom, including students, media, learning methods, and models. The design results are designing KI, KD, learning objectives, materials, and videos for learning, selecting templates, backgrounds, texts, animations, and other features according to research needs. The development stage produces learning videos made with the help of the Canva application; lesson plans to guide media use, and questions to measure students' creative thinking abilities. At the implementation stage, data is produced from the test results after applying video media to the learning process. The data is then processed to see students' creative thinking abilities. The final evaluation stage produces feedback from student responses after using video media in learning. The student response questionnaire results show that the media is included in the appropriate criteria by obtaining an average score of 3.6.

To answer the problem formulation in the previous chapter, the learning video was validated at the development stage. The results of the media suitability assessment by media experts received an average score of 3.8 (very feasible). The results are included in the very acceptable criteria, as seen from the score obtained in the $3.26 < X = 4.00$ range. Media experts suggest improvements to the media to improve the color of the text and reduce unnecessary images. This is intended so that the color of the text varies and students are not focused/distracted by images unrelated to the material. The VA class teacher did not provide suggestions or input on the videos developed. Meanwhile, the VB class teacher provided recommendations for improving the sentences in the quiz at the end of the video so that it is easy to understand and effective.

After the validation process, the media is used in the learning process. At the implementation stage, experimental class students or classes that use media in learning provide an assessment of the video being developed. The feasibility assessment carried out by the VB class obtained an average score of 3.6, which means it is included in the very feasible criteria. Based on the validation results carried out by media experts, teachers, and students, it was found that the requirements were very suitable, so Canva learning videos were ideal for use as learning media on the Objects Around Us material.

This research was conducted to determine the differences in student learning outcomes with different treatments in the two groups. Researchers gave a pre-test to see the condition of

students' initial abilities. A post-test is given to see whether students' creative thinking abilities have developed. The data that has been processed shows significant differences in the use of Canva learning media. In answering the first hypothesis, namely whether there is a difference between Canva media on students' grades or learning outcomes, from data analysis, it is known that the probability value (sig.) is 0.048, so it can be concluded that H_0 is rejected and H_1 is accepted, meaning that there is a significant difference from the use of Canva media.

Based on the results of this research, compared with research conducted (Puspita et al., 2023) (Fauziah & Putri, 2019), it shows that Canva animated video learning media influences students' creative thinking abilities. Research conducted by (TriskawatiBeta Rapita Silalahi, 2022) Shows that the video learning media developed is also suitable for use in the learning process on theme nine objects around us, as well as research carried out by (Priangga, 2021) The research results show that video media can facilitate students' creative thinking abilities.(Riberio, 2023) (Sutaphan & Yuenyong, 2023)(Tiryaki, O. Caki, 2019).

CONCLUSION

Based on the results and discussion, it can be concluded that The feasibility of the resulting media is in the very good category with an average score of 3.8, which means the media is suitable for use as a science learning medium on the theme of Objects Around Us and good criteria. Viewed from the aspects of (1) language, (2) writing, (3) images, and (4) video design.

Based on the data analysis that has been carried out, the results show that Canva-based learning media influences students' creative thinking abilities because the Sig value known (2-tailed) is $0.048 < 0.05$.

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