

DEVELOPMENT OF ANIMATED VIDEO-BASED LEARNING MEDIA IN PANCASILA EDUCATION FOR SECOND-GRADE ELEMENTARY SCHOOL STUDENTS

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Abstract

Education in the digital era requires innovative and engaging learning media to enhance students' understanding of abstract concepts, particularly in elementary education. This study aims to develop animated video learning media for Grade II students in the subject of Pancasila Education on the topic "*Diversity Is Beautiful*." The research seeks to describe the development process using the ADDIE model, determine the feasibility of the media through expert validation, and assess its effectiveness in improving learning outcomes. Employing a Research and Development (R&D) design with five ADDIE stages—Analysis, Design, Development, Implementation, and Evaluation—data were obtained through validation questionnaires from content, media, and language experts, as well as trials involving students and teachers selected through purposive sampling. Data were analyzed descriptively based on expert validation scores, student and teacher responses, and learning outcome tests compared to the Minimum Mastery Criteria (KKM). The validation results showed high feasibility with scores of 88% from the content expert, 92% from the media expert, and 88% from the language expert. The effectiveness test demonstrated improved learning outcomes exceeding the KKM, with positive responses from students (83%) and teachers (92%), both categorized as "highly effective." Thus, the animated video learning media on "*Diversity Is Beautiful*" is proven to be feasible and effective for use in teaching Pancasila Education in Grade II elementary school.

Keywords:

Learning Video, Pancasila Education, Elementary School

INTRODUCTION

Education serves as a means to enhance students' skills and abilities. It holds a central role in the development of the nation and the state. Education functions as the foundation for shaping human quality with competitiveness and the capacity to absorb technology that continues to evolve over time (Assa Riswan, 2022). In order to improve the quality of education, the learning process must be more creative and innovative. One of the ways to make the learning process more innovative is by utilizing the ever-developing technology. The world of education today is heavily influenced by technological

advancements, especially in the learning process, as the use of learning media can greatly facilitate educators (Anggrayni et al., 2023). Education in the 21st century emphasizes digital literacy, critical thinking, creativity, and collaboration as essential competencies for learners (Trilling & Fadel, 2009; Sari & Prasetyo, 2021). Therefore, teachers are encouraged to integrate technology into the classroom to foster active learning environments and improve student engagement (Ariyanti et al., 2022).

Pancasila Education is one of the subjects taught in elementary schools within the Merdeka Curriculum. It is a subject aimed at instilling the values of Pancasila in students from an early age. In elementary schools, Pancasila Education is taught through various learning activities such as discussions and role-playing. Interesting and interactive learning media are needed to help students understand Pancasila values. Pancasila Education teaches students how to develop good character within their surroundings. This subject serves as a medium for students to behave according to moral and social norms (Iskandar, 2017). According to Hartono and Kurniasih (2023), Pancasila Education must adapt to digital learning paradigms by using multimedia-based learning media to make abstract moral concepts easier to grasp. Similarly, Nurdin et al. (2022) stated that value-based education supported by visual and auditory media can enhance students' affective learning outcomes and empathy development.

The learning process is an interaction between teachers, students, and the media used, involving reciprocal communication between teachers and students. Learning becomes more interesting when educators can make the process more engaging. According to Windi Anisa et al. (2020), teachers must master the material or subject matter to be taught during the learning process. In addition, they must be able to develop or enhance their scientific knowledge and skills. During the learning process, there should be a transfer of knowledge from teachers to students as well as an exchange of knowledge and information among students to ensure that learning runs effectively. Interesting learning activities are those that can motivate students to learn enthusiastically. Teachers must also continuously develop and improve their knowledge and competencies so that learning becomes more effective. In addition to transferring knowledge, teachers should also facilitate interaction and collaboration among students, enabling them to exchange ideas and learn from one another, ensuring that the learning process proceeds optimally. As noted by Kurniawan and Lestari (2023), student-centered learning supported by media integration increases learners' curiosity and retention of concepts.

To improve the quality of education, the learning process must be more creative and innovative. One of the ways to make the learning process more innovative is by utilizing the rapidly developing technology. The world of education today is heavily influenced by technological progress, particularly in learning activities, since the use of learning media can assist teachers (Anggrayni et al., 2021). Technology can help make the learning process more diverse and engaging. Science and technology continue to evolve, and by integrating technology into learning, positive impacts can be achieved for students' educational experiences. According to Prawiradilaga (2020), technology integration enables contextual learning that aligns with students' daily lives, while Dewi and Astuti (2022) emphasize that digital learning media can accommodate different learning styles and increase motivation.

By utilizing technology in learning, education becomes more interesting, creative, and innovative. Learning requires media or teaching materials as learning resources for students. Many learning resources can serve as teaching materials, and with the introduction of technology into education, even more resources are now available. Engaging learning media will attract students' attention toward the subject matter. Chaidar (2014) explained that the development of information and communication technology continues to increase in line with human needs, including in the field of education. One of the efforts teachers can make to improve learning is by developing teaching materials using interesting instructional videos. This is supported by Nugroho et al. (2021), who found that video-based learning can enhance cognitive and affective domains simultaneously. Interactive video media allow students to connect theory with practice through visual representation, making it easier to understand abstract concepts (Sukmawati & Nabila, 2023).

Interactive learning videos are educational resources that contain elements such as sound, motion, images, text, and graphics that allow for interaction. These interactive features make the media easier to understand, enabling students to study independently at any time and significantly supporting their

comprehension of the material (Wardani & Syofyan, 2018). Similarly, research by Fitriani et al. (2022) indicates that multimedia learning based on animation and narration helps elementary students retain moral and civic education concepts more effectively compared to traditional learning methods.

Based on the issues identified by researchers at SDN 4 Sukamekarsari, particularly in the second-grade class, there is a need to examine the limited use of technology-based teaching materials by teachers. During the learning process, teachers rely solely on textbooks, with minimal utilization of technology-based learning materials. The learning process remains teacher-centered (teacher-centered learning), and students' scores are still below the Minimum Mastery Criteria (KKM). This finding aligns with the report by Rahmawati et al. (2023), which states that many elementary schools still depend on conventional methods, resulting in low student engagement and comprehension.

As a solution to these problems, this study aims to develop technology-based teaching materials in the form of animated learning videos. This learning medium was selected because it can help students better understand the material through more interactive learning experiences. The problem-solving plan in this study is to develop an animated video-based learning medium that aligns with the characteristics of second-grade elementary school students. The product produced will be validated by material experts, media experts, and language experts and tested with students. Through these steps, it is expected that a feasible and effective instructional medium will be obtained. According to Heinich et al. (2021), the development of instructional media through systematic design models ensures alignment between learning objectives, learner characteristics, and the chosen media, enhancing both effectiveness and learner satisfaction.

Furthermore, this research is expected to provide practical benefits for teachers in implementing more innovative learning. Based on this explanation, the objectives of this study are:

1. To describe the steps in developing an animated video-based learning medium for the Pancasila Education subject.
2. To analyze the feasibility of the animated video-based learning medium for second-grade students in the Pancasila Education subject.
3. To analyze the effectiveness of using the animated video-based learning medium in Pancasila Education.

This research is expected to produce an appropriate and effective animated video-based learning medium that can enhance students' motivation and understanding. Additionally, the results of this study are expected to serve as a reference for teachers in implementing more innovative and creative learning practices.

METHODOLOGY

Research Method Type

This study employed a Research and Development (R&D) approach. The R&D method is a research approach designed to produce a particular product and to test its effectiveness in practice (Sugiyono, 2020). The research model used in this study was the ADDIE model, which consists of five systematic stages: Analysis, Design, Development, Implementation, and Evaluation. This model provides a structured framework that guides the development of instructional media in a systematic and iterative manner, ensuring the produced learning material is pedagogically sound and practically effective. The choice of this model was based on its flexibility and suitability for developing innovative learning media that can be continuously refined based on expert validation and learner feedback.

Sample and Sampling Technique

The population in this study comprised all students at SDN 4 Sukamekarsari. The research sample consisted of second-grade students, totaling 26 learners, selected using a purposive sampling technique. This technique was chosen to ensure that participants matched the learning content and grade level of the developed media. The sample was considered representative because it directly involved the target users of the "*Diversity Is Beautiful*" animated learning video, thereby providing valid data regarding its feasibility and effectiveness in real classroom contexts.

Data Collection Techniques

The data collection techniques employed in this research included tests, interviews, questionnaires, and documentation. The research instruments consisted of expert validation questionnaires—covering material, media, and language aspects—student and teacher response questionnaires, and pretest–posttest assessments to evaluate learning outcomes. Expert validations were used to assess the content accuracy, design quality, and linguistic appropriateness of the developed learning media. Student and teacher response questionnaires measured the practicality and attractiveness of the animated videos during classroom trials, while the pretest and posttest results were used to determine the effectiveness of the learning media in improving students’ understanding of the Pancasila Education topic.

Data Analysis Techniques / Research Procedures

The data analysis in this study utilized both quantitative and qualitative approaches. Quantitative data were obtained from expert validation scores, student and teacher response questionnaires, and pretest–posttest results. These data were analyzed using descriptive statistics and the N-Gain formula to measure the improvement in student learning outcomes before and after using the developed media. Meanwhile, qualitative data were gathered from interviews and open-ended feedback provided by material, media, and language experts, as well as from teachers’ and students’ comments during the trial process. The qualitative findings provided deeper insights for revising and refining the animated learning media, ensuring that it meets both pedagogical and practical standards for classroom implementation.

RESULTS AND DISCUSSION

The development of instructional materials based on animated learning videos for the Pancasila Education subject in the second grade of elementary school in this research used the ADDIE model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. This study produced several outcomes, including the product development process, the assessment of product feasibility, and the effectiveness of the product in the learning process, which are explained as follows.

In the analysis stage, the researcher examined the actual field conditions relevant to the research objectives. This stage aimed to identify students’ learning needs and review the existing learning materials. Data were collected through interviews with the homeroom teacher of the second grade at SDN 4 Sukamekarsari to determine students’ learning challenges. The needs analysis revealed that the Pancasila Education learning process was still monotonous because it relied solely on reading texts, which made students less interested and less focused. This situation negatively affected students’ comprehension and learning outcomes, which were further influenced by differences in their abilities. Moreover, teachers showed limited use of technology in their teaching process. These findings indicated the need for an innovative learning approach that could increase students’ motivation, engagement, and independence. Therefore, the development of animated video-based instructional media was considered appropriate as an alternative learning resource. Material analysis was then conducted based on the Merdeka Curriculum for Pancasila Education in the second grade, referring to the Learning Outcomes (Capaian Pembelajaran) and Learning Objective Flows (Alur Tujuan Pembelajaran). Based on this, the researcher developed a learning video that incorporated illustrative images and audio elements to make the material more engaging and to help students achieve the learning outcomes outlined in the curriculum.

According to Sugiyono (2020), the analysis stage in the ADDIE model is essential for aligning instructional materials with students’ characteristics and the context of the learning environment. Similarly, Yuliani et al. (2023) highlight that a proper needs analysis ensures that learning media address real classroom problems and foster student-centered learning. The integration of digital media aligns with the current educational paradigm that emphasizes technological literacy and interactive learning (Sari & Pratama, 2021; Fauziah et al., 2022).

In the design stage, the researcher created the structure and flow of the learning video. The material was based on Chapter 3, “Diversity is Beautiful” (Berbeda Itu Indah), from the second-grade Pancasila Education module in the Merdeka Curriculum. A storyboard was prepared to visualize the sequence of

materials and provide real-life examples, while the narration was written using simple language appropriate for second-grade students. To enhance the video's appeal, additional design elements such as background music were included. The researcher utilized Canva, an online design platform, to create the instructional media, allowing the final product to serve as a technology-based learning resource that could be used in classrooms or independently by students.

In the design process, Mayer's (2009) Cognitive Theory of Multimedia Learning emphasizes that effective learning videos should combine visual and auditory information coherently to reduce cognitive overload. Following this principle, the video was designed to ensure clarity, simplicity, and focus on key messages. Puspitasari & Andriani (2022) found that storyboard-based design helps maintain narrative flow and visual consistency, which is crucial for young learners' attention span. Furthermore, Pratiwi et al. (2023) reported that the use of Canva as a digital design tool enables educators to create interactive and visually appealing learning materials that support multimodal learning.

The development stage involved producing the video according to the previously designed concept. The video had a duration of approximately five to six minutes to match the attention span of elementary school students. The content included moving animations and real-life examples, accompanied by AI-generated narration and subtitles to enhance comprehension. Once the video production was complete, it was validated by three experts—a material expert, a media expert, and a language expert—to ensure quality in terms of content, design, and language before classroom implementation.

The material expert, Mrs. Alpiani, S.Pd., conducted validation on May 8, 2025, focusing on content clarity and accuracy. The expert concluded that the product was feasible with minor revisions, giving a total score of 44 and an average feasibility percentage of 88%, categorized as "Highly Feasible." The suggestion to add subtitles to all video segments was implemented accordingly. Media validation was conducted by Dr. Dede Kurnia Adiputra, M.Pd., on the same date. The expert assessed the video's quality and functionality and determined that it was feasible without revisions, giving a total score of 46 and an average percentage of 92%, also categorized as "Highly Feasible." It was recommended to gather feedback from teachers who would use the media in classroom settings. Language validation was carried out by Mr. D. C. Aryadi, M.Pd., also on May 8, 2025, following the standards of the Indonesian Language Dictionary (KBBI). The expert found the language appropriate for elementary students and suggested adding spacing between sentences to improve readability. The video received a total score of 44, with an average feasibility percentage of 88%, categorized as "Highly Feasible."

These validation results are in line with Rahman & Fitriani (2020) and Handayani et al. (2021), who found that the use of expert validation ensures the reliability of instructional media in terms of content and language appropriateness. In addition, Hartono & Lestari (2022) emphasized that short-duration learning videos (under 7 minutes) are optimal for sustaining elementary students' concentration. Similar findings by Nugraha et al. (2023) demonstrated that the integration of AI-generated narration improves students' understanding and retention of conceptual material.

The implementation stage served as an essential phase for testing the effectiveness of the product that had been validated by experts. The implementation of the animated video-based instructional media took place at SDN 4 Sukamekarsari, Kalanganyar District, involving 26 second-grade students and their teacher. During the implementation, learning sessions utilized the developed video to make lessons less monotonous and to increase students' motivation.

The results showed that the average Final Semester Examination (UAS) score increased from 70 in the pretest to 87 in the posttest. The highest score improved from 88 to 100, while the lowest score rose from 48 to 80. The average N-Gain value achieved by the students was 0.57, which fell into the "medium" category, indicating that the media was moderately effective. The student response questionnaire results showed that 83% of students rated the video as "very effective." In addition, the teacher's response, collected through a questionnaire completed by Mrs. Ayu Sabatini, S.Pd., the second-grade homeroom teacher, on May 19, 2025, yielded a total score of 46 with an average percentage of 92%, categorized as "Very Effective."

These findings are consistent with Suhendro et al. (2022), who noted that students' motivation and learning outcomes significantly improve with the use of animated and multimedia learning resources.

Amiruddin & Laili (2021) also found that interactive videos help students retain moral values better, especially in character education subjects. Furthermore, Kurniawan et al. (2023) observed that the combination of animation, narration, and sound effects fosters emotional engagement and curiosity among learners.

The evaluation stage aimed to assess the overall quality, attractiveness, and effectiveness of the animated learning video. The evaluation consisted of two types: formative and summative. Formative evaluation was conducted throughout the development process, with experts providing continuous feedback during the validation stages. Summative evaluation was carried out after the classroom implementation using various instruments, including learning outcome tests, student response questionnaires, and teacher interviews.

The evaluation results showed a significant increase in students' performance after using the video. Students exhibited higher interest in learning, participated actively during lessons, and were able to provide examples related to daily life. Therefore, the animated video-based instructional media for Pancasila Education developed in this study was declared feasible and effective for use as a learning resource for second-grade elementary school students.

This aligns with Wijayanti & Suryani (2020), who emphasized that summative evaluations validate the overall success of instructional design projects. Additionally, Rizky & Nurfadilah (2024) highlighted that integrating moral and civic education with multimedia tools enhances affective learning outcomes, not just cognitive ones. The results of this research thus reinforce the conclusion that animated learning videos are an effective and engaging medium for teaching Pancasila values in the Merdeka Curriculum context.

CONCLUSION

The research and development process in this study successfully produced an animated video-based instructional medium for the Pancasila Education subject in the second grade of elementary school, focusing on the topic "*Diversity is Beautiful*" ("*Berbeda Itu Indah*"). The development process followed the ADDIE model, which consists of five systematic stages—Analysis, Design, Development, Implementation, and Evaluation—ensuring that the product was pedagogically structured and aligned with the learning objectives of Pancasila Education.

Based on the validation results, the animated learning video demonstrated a high level of feasibility, achieving scores of 88% from the material expert, 92% from the media expert, and 88% from the language expert. These results classify the developed learning media as "*Highly Feasible*" for classroom application. Furthermore, the implementation of the animated video showed significant effectiveness in improving student learning outcomes. The pretest–posttest results revealed an increase in the average student score from 70 to 87, with an N-Gain value of 0.57, indicating a *moderate* level of effectiveness.

In addition, the response questionnaires demonstrated positive user perceptions, with students giving an 83% rating and teachers giving a 92% rating, both categorized as "*very effective*." These findings suggest that the animated video successfully enhanced students' engagement, motivation, and understanding of the concept of diversity in Pancasila Education. Therefore, it can be concluded that the animated video learning media developed in this study is both feasible and effective for use as a learning resource to support the teaching and learning process of Pancasila Education in Grade II elementary schools.

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