

Development of Interactive PowerPoint Media on the Diversity of Pancasila Education in Elementary Schools

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Abstract: The use of media in Pancasila Education teachings is still subpar, based on observations and identifications made by researchers from fourth-grade students in SDN Raci 01 Batangan District. When compared to other subjects, the learning outcomes in this one remain poor. Consequently, the creation of educational resources is required. In order to enhance Pancasila Education's learning results for fourth-grade students at SDN Raci 01, Batangan District, this study aims to develop interactive learning materials based on Microsoft PowerPoint. Research and Development (R&D), using a mixed-method research technique, is the research method employed in this study. All fourth-grade kids from SDN Raci 01, SDN Ngening 01, and SDN Ketitangwetan 01 will make up the research population, which will be carried out on January 20, 2025, during the even semester. Three fourth-grade teachers from each school participate in the study as representatives of the fourth-graders and as resource people. Observation, interviews, student learning outcomes, and questionnaires were among the methods used to collect the data. Normality tests, reliability tests, t-tests, and n-gain were then used to analyze the data. The research results show that interactive learning media can improve the learning outcomes of 4th-grade students at SDN Raci 01 on the topic of diversity, evidenced by an average increase in post-test learning outcomes of 0.592, which falls into the moderate category. The validation results indicate an average score of 4.25 out of a maximum score of 5 by media practitioner experts and an average score of 4.4 out of a maximum score of 5 by language practitioner experts, followed by an average score of 4.4 out of a maximum score of 5 by material practitioner experts. The results of the teacher response questionnaire also showed an average score of 4 out of a total score of 4, which falls into the very feasible category for implementation to 4th-grade elementary school students. In addition, interactive learning media is effectively applied in the 4th Grade of SDN Raci 01 in Pancasila Education lessons on diversity. This is evidenced by the calculation of the average difference test, where the t-value is 11.834 with a significance value of 0.000, thus H_0 is accepted because the significance is < 0.05 , which means there is a difference in learning outcomes between the pretest and posttest of Class IV SDN Raci 01. The conclusion of this study shows that interactive learning media can improve the learning outcomes of Pancasila Education for 4th-grade students at SDN Raci 01 regarding diversity material. This interactive media has been validated by media practitioners, language practitioners, and material practitioners, and is effectively implemented in the 4th Grade of SDN Raci 01, Batangan District.

Keywords: Interavtive, Microsft PowerPoint, Pancasila Education

1. Introduction

The Merdeka Curriculum is a transformation of the Indonesian education system to produce an excellent generation with the concept of Merdeka Belajar. Merdeka Belajar, educators are more maximal in innovating to improve the quality of learning, (Saleh, 2020: 51-56). In line with Saleh, Daga (2021: 1075-1090) stated, "Merdeka Belajar helps in thinking creatively, innovatively, freely, and happily during the learning process." It cannot be denied that in the Merdeka curriculum, learning does not only take place in the classroom because the Merdeka curriculum emphasizes that teachers can facilitate students' talents and interests.

According to Widyastuti (2022: 92), "the task of such an impressive education will be very difficult to carry out." There will be difficulties and obstacles in the field for training that takes place in the context of knowledge transfer and instruction implementation. Because the Merdeka Curriculum is still a relatively new concept, its implementation has not gone according to plan. Because so many changes have been highlighted and many of them do not work effectively in the classroom, teachers feel constrained in adopting the Merdeka Curriculum.

As a driving school teacher and a speaker in the KKG Batangan district, I found several facts that the majority of teachers in the Batangan district have not yet been able to implement the independent curriculum, even though the learning content is actually the same as the 2013 curriculum. As a result, teachers have not developed or used learning media. In agreement with the researchers, Dewi et al. (2022: 31-39) found another fact that "teachers in the regions have not yet received training on the independent curriculum, including many teachers admitting that they have not implemented learning according to the independent curriculum's achievements, and have also not applied cognitive assessments to measure their students' learning outcomes." Thus, students who should receive education tailored to their interests and talents feel that they have not been facilitated because the learning still seems monotonous.

Learning at school requires interaction between teachers and students. When teachers transfer knowledge to students, a learning medium is necessary, therefore teachers are expected to keep up with the times. According to Fatkhil et al. (2022), "in this digital era, the learning media used in the teaching and learning process should also keep up with the times, namely technology-based learning media." In line with Fatkhil, Rahmatus (2023: 2449-2459) stated, "learning in this century is inseparable from the role and use of appropriate technology in supporting innovative learning." With teachers facilitating students, good communication can be established, making it easier for educators to convey the material. Strengthening the opinion of the previous expert, Nofriyandi et al. (2021: 22) stated, "learning media is one of the keys to the success of a learning process." Therefore, the learning media utilized by educators greatly influences students' motivation to learn. This is reinforced by Novilanti & Suripah (2021: 357-367) who state, "one way to attract students' interest in the learning process is by using learning media." Thus, it can be concluded that the occurrence of communication between students and teachers through the use of learning media is essential to attract students' enthusiasm for learning and to enhance their cognitive abilities.

Media is something that conveys messages convincingly and can stimulate the thoughts, feelings, and will of the audience (students), thereby encouraging their learning process (Shintya et al., 2022). However, in this digital era, many schools have not yet adopted IT-based learning media, especially in the subject of Pancasila Education. However, Pancasila Education is not just a theory that must be mastered but primarily the instillation of character. The perception of students can be caused by the use of strategies and learning media that do not align with the interests and mindset of the students. Thus causing children to become bored and lazy in learning Pancasila Education.

1.1 Conceptual framework

The rapid development of technology allows educators to take advantage by creating innovative works and being creative in making learning media that is interesting, efficient, effective, and practical. However, many teachers have not yet implemented it in the teaching and learning process. However, teachers in Indonesia are required to have academic qualifications and competencies, namely the ability to articulate and achieve educational goals, be physically and mentally healthy, and possess competencies as learning agents (Blazar & Kraft, 2017: 146-170). Jafar (2020) "states that IT-based learning media that support the use of gadgets provide greater opportunities for learning enthusiasm." Development can be enhanced with various types of applications.

Previous relevant research conducted by Laili (2021) in her study titled "Development of Interactive Learning Media Using Microsoft PowerPoint on Circle Material for 6th Grade Elementary School," found that the media did not include LKPD for learning evaluation materials, and there was no profile of the media creator, making it impossible to contact the creator in case of issues or if assistance was needed. Then, Wulandari et al. (2024) in their journal on the development of interactive learning media using Microsoft PowerPoint on the topic of hydrostatic pressure, where the learning objectives were not included and the animations for the correct and incorrect quiz answers, so that students do not know which answers are correct or incorrect from the quiz. If it is a quiz, it would be better if there was confirmation in the media whether the answer is correct or incorrect.

Anyan (2020) and Rahmawati (2023) have similarities in their research related to the development of interactive media based on Microsoft PowerPoint, emphasizing that the developed media is a combination of text, images, and videos that form a set of presentations. One of the weaknesses of previous research lies in the less intuitive interface design, making it difficult for users. Then, researcher Sasmitha (2024) developed interactive media based on Microsoft PowerPoint. The design of this interactive media was hindered by an unappealing color composition and monotonous animations, which reduced students' interest in actively engaging. The use of hard-to-read fonts became a major obstacle in this media, hindering students' understanding of the presented material. My research addresses this by focusing on a user-friendly and easily navigable design, in accordance with Arsna's opinion that the use of visual technology in learning media helps students understand the material more quickly because they can see and feel what is in the object (Arsna, 2024).

Several previous studies encouraged researchers to further develop interactive media using the Microsoft PowerPoint application. The media updates developed by the researchers include image animations, audio, video links, and ice-breaking activities, which attract students' interest and motivation to learn and create a reciprocal relationship between

educators and students. The interactive media starts with a home page containing the media's identity, followed by slides that include learning objectives, teaching modules, materials, quizzes, student worksheets (LKPD), ice-breaking activities, and the developer's profile. The TP column contains the learning objectives to be achieved in that lesson, while the material column includes animations, audio, and educational videos. The quiz consists of multiple-choice questions and answer confirmation through animations, so students know which answers are correct. Next, the LKPD will be provided in a printable format for evaluation, along with an answer key so that teachers can summarize today's learning outcomes.

Research on the development of conventional PowerPoint-based learning media tends to focus on the presentation of static information, while updated research on interactive Microsoft PowerPoint-based media emphasizes active student engagement through interactive features such as quizzes, simulations, and non-linear navigation. If previous research on PowerPoint learning media focused more on visually appealing slide designs, current research on interactive Microsoft PowerPoint media emphasizes the development of features that support user interaction, such as the use of hyperlinks, action buttons, and animations triggered by user actions. Compared to research on the development of PowerPoint learning media, which often results in linear presentations, recent studies on the interactive features of Microsoft PowerPoint produce more dynamic and adaptive media, allowing students to explore learning materials at their own pace and interest. In essence, the main difference lies in the level of interactivity and student engagement. Interactive media based on Microsoft PowerPoint offers a more dynamic and personalized learning experience.

1.2 Research objectives

Exploring the need for the development of interactive learning media based on Microsoft PowerPoint for diversity material for 4th-grade elementary school students in Batangan District. Furthermore, this research aims to formulate the design of the media, test its feasibility, and finally test the effectiveness of the developed interactive learning media.

2. Methodology

2.1 Research design

The development of Microsoft PowerPoint-based learning media uses the Research and Development (R&D) method. Sugiyono (2016:297) explains that the research and development method is a research method used to produce a specific product and test the effectiveness of the product. In this study, the researchers chose the Borg and Gall model because this research model is quite detailed at each stage and can be adjusted to the conditions occurring in the field. The steps or stages of this research and development consist of: 1) Research and information collecting; 2) Conducting planning; 3) Developing the preliminary form of the product; 4) Conduct preliminary/limited field testing; 5) Conducting preliminary product revision; 6) Conducting main/extensive field testing; 7) Conducting revisions of the main field test product (operational product revision); 8) Conducting operational field testing; 9) Final product revision; and 10) Disseminating and implementing the product (dissemination and implementation).

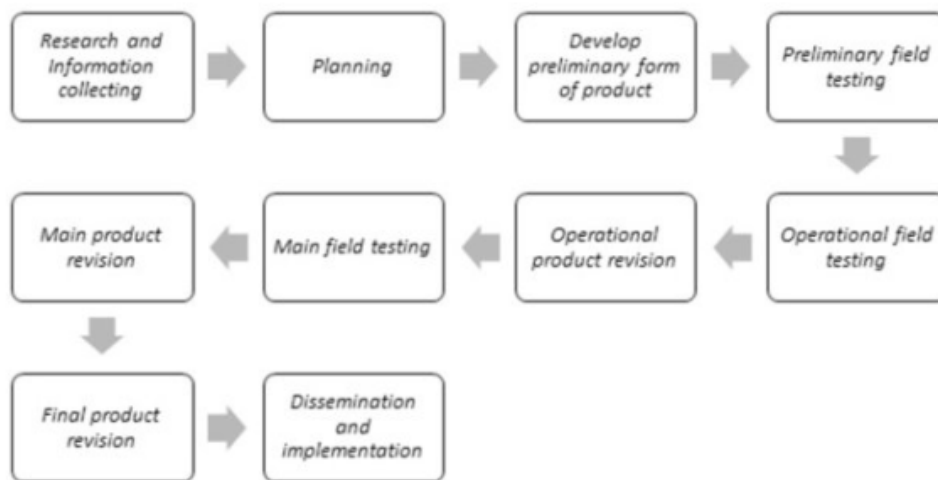


Fig. 1 - Borg and Gall Research and Development Model

2.2 Respondents of the study

The population framework of this research is 4th-grade students from three (3) elementary schools in the Batangan district. The researcher used cluster sampling techniques to select subjects due to the limited time allowed by the principal of the chosen elementary school. To conduct the research, permission was granted by the 4th-grade teacher and the principal.

The lack of mastery in Pancasila education in the 4th grade is a strong signal that more varied and contextual learning media innovations are urgently needed, as evidenced by formative assessment data from SDN Raci 01, SDN Ngening 01, and SDN Ketitangwetan 01.

Table 1 - Table of Values Covering the Material Scope of the Pancasila Education Subject for Grade IV

No	School Name	average			Percentage of completion		
		LM1	LM2	LM3	LM1	LM2	LM3
1	SDN Raci 01	79,52	77,72	63,48	80,00%	68,00%	28,00%
2	SDN Ngening 01	76,12	80,28	71,66	76,00%	84,00%	48,00%
3	SDN Ketitangwetan 01	76,29	76,41	73,17	82,35%	76,47%	41,17%

3. Findings and discussion

The fourth-grade teacher at SDN Raci 01 still uses conventional teaching methods, which causes students to struggle with understanding the material and affects their learning outcomes, even though learning media has many benefits in standardizing the delivery of material, making learning more engaging, and improving learning outcomes. To address this issue, the researcher plans to develop interactive technology-based learning media for the subject of Pancasila Education, specifically on the topic of Diversity, based on students' enthusiasm for interactive media and teachers' acceptance of developing more creative media. This media is expected to make learning more enjoyable, improve students' understanding, and help them apply the concept of Diversity in their daily lives, in line with the goals of the Independent Curriculum to enhance the quality of education and develop the character of the nation. This PowerPoint-based interactive media can make learning more effective, interactive, and enjoyable, as well as improve students' learning outcomes, considering the important role of media in learning that must be based on strong data.

The development of this media follows the research and development stages of Borg and Gall, Sugiyono (2016:54), starting with observations at SD Negeri Raci 01 to identify issues in Pancasila education learning, particularly on the topic of Diversity, as well as the lack of teachers' ability to develop innovative learning media. This interactive media is an innovation of the illustrated paper media often used by teachers, designed for the Diversity material, which includes understanding Diversity, Diversity in Indonesia, and its application in daily life. The design of this interactive learning media based on Microsoft PowerPoint aims to make learning engaging and enjoyable with PowerPoint features to enhance student understanding, encourage learning interest, and achieve learning objectives, in line with the importance of media innovation in the education system.

The feasibility of this interactive learning media has been validated by media experts, language experts, and subject matter experts, with an average score that is very good, indicating that this media is very suitable for implementation with fourth-grade students at Raci 01 Public Elementary School. The results of the small group test showed students' interest in the interactive media, and the large-scale test with an N-Gain value of 0.59 in the moderate category proved the media's effectiveness in improving students' learning outcomes. This research indicates that the use of this interactive media successfully enhanced the learning outcomes and quality of education for the 4th-grade students of SDN Raci 01, emphasizing that innovation in learning through media is crucial to achieving educational goals, especially in the subject of Pancasila Education, which aims to instill the noble values of Indonesian culture.

Table 2 - Validation results table by expert team

Validator	Validation Field	Total Score	Average	Criteria	Additional notes (if any)
SN	Media Expert	42	4,2	Very Worthy	Reduce Animation
DSL	Media Expert	45	4,5	Very Worthy	-
SA	Language Expert	48	4,4	Very Worthy	-
Y	Language Expert	46	4,4	Very Worthy	-
DM	Content Expert	46	4,6	Very Worthy	The practice questions are adjusted to the conditions of the students.
SPL	Content Expert	42	4,2	Very Worthy	The material is appropriate and aligns with the learning objectives.

After consulting media experts, the researcher undertook the process of media improvement. The media experts welcomed the researcher's interactive learning media. The first media expert gave an average score of 4.2 and the second media expert gave an average score of 4.6, indicating that the media created is very suitable for application to fourth-grade elementary school students. Meanwhile, the assessment from the two language experts, Mrs. Sri Arofah, S.Pd.SD, M.Pd. and Yunarti S.Pd.SD, gave an average score of 4.4, indicating that the material provided to the students is very suitable. Lastly, the validation from the material expert team, namely Mrs. Dany Murwati, S.Pd. and Mrs. Sri Puji Lestari, S.Pd., with average scores of 4.6 and 4.2 respectively, indicates that the material is suitable for interactive media for further research. Based on the evaluation of the three expert teams, it can be concluded that the interactive media is very suitable for use in the Pancasila Education subject on diversity for fourth-grade elementary school students

Research that successfully improves learning outcomes requires proof of its effectiveness, particularly in the cognitive domain. This is measured through a t-test to compare pretest and posttest scores, which is then reinforced with an N-gain test. It is important to ensure the normality of pretest and posttest data before conducting the t-test.

The use of technology in learning becomes crucial considering children's familiarity with electronic devices. In line with Siti's (2022) statement that technology serves as an aid in achieving the curriculum, the use of technology-based media is expected to enhance students' interest in learning and overcome boredom. However, this innovation must be tailored to the characteristics of the students, especially high school students.

Besides media, teaching methods also play a significant role in improving learning outcomes. Mardianto (2023) highlights that the selection of appropriate teaching methods, aligned with the material, student characteristics, and learning objectives, significantly influences the effectiveness of the learning process and character development.

The use of learning media has proven to make it easier for students to understand the material, as seen in the understanding of the example of Diversity after the intervention. In the context of Pancasila Education, which aims to instill the noble values of Indonesian culture from an early age, learning media greatly assist students at SD Negeri Raci 01 who still struggle to understand this concept. This is in line with Aprilia's (2021) opinion that media facilitates understanding, data interpretation, and information consolidation, so teachers need to innovate in teaching Pancasila education with a variety of methods and media.

Theoretically, media is considered effective if it can improve learning outcomes and stimulate student interest. The effectiveness of learning also requires the active involvement of students in the learning process and, if necessary, the development of new learning models, considering that elementary school students tend to get bored quickly. The role of the teacher is not just the transfer of knowledge, but also facilitating understanding. Based on empirical evidence, the use of interactive media in class IVa SDN Raci 01 has proven to not only improve students' learning outcomes but also the overall quality of education.

4. Conclusions and recommendations

This research produces learning media that can be used to improve the quality of learning and student learning outcomes in the fourth grade at SDN Raci 01. Based results of the needs analysis show that teachers and students need interactive and engaging learning media for diversity material. The existing learning media are still less interactive and have not optimally utilized technology, as evidenced by the learning outcomes of the 4th-grade students at SDN Raci 01, who achieved an average score of 63.48 with a completeness rate of only 28.00% on the Pancasila Education diversity material.

The design of interactive learning media based on Microsoft PowerPoint developed includes an attractive appearance, animations, videos, practice questions, and feedback. The material is presented in a structured manner and is easy for students to understand.

The developed interactive learning media has been tested for its feasibility by media experts and subject matter experts. The feasibility test results indicate that this learning media is highly suitable for use in education. The results of the validation by subject matter experts and media experts indicate that the interactive media is highly suitable for use in Pancasila Education, with an average score of 3.61 out of a total of 4 by media experts and an average score of 3.89 out of a total of 4 by subject matter experts. The teacher response questionnaire also received an average score of 4 out of a total of 4, indicating that the interactive media is very suitable for use by elementary school students.

The effectiveness test shows that the use of interactive learning media based on Microsoft PowerPoint improves students' learning outcomes on diversity material. This shows that this learning media is effective in helping students understand the learning material. The learning outcomes of the fourth-grade students at SDN Raci 01 on the topic of Diversity can be improved with interactive learning media. This is evidenced by the increase in the average posttest learning outcomes of the students by 0.592, which falls into the moderate category with an average score of 80.00

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Conflict of Interest

The authors declare there is no conflict of interest

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