

## Learning Pancasila Education and Citizenship based on Digital Media to Stimulate Student Engagement in Improving the Quality of Learning

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### Abstracts

Technological developments bring changes in the learning process as demands in the world of education. To stimulate student engagement to improve the quality of learning, innovation is needed to develop learning digital media that adapts to the times as a source of student learning. The research objective is to create digital media-based digital media that can be used as an alternative in online and offline learning for students, according to student characteristics. The research method that will be used in this research is the ADDIE model research and development method and will be planned for one year. This research will be conducted in an elementary school in Kebayoran Baru District, South Jakarta. In the first four months, among others, literature reviews on media, identifying electronic media, and digital media development problems. The application is produced in the second 4-month stage, media validation, learning design effectiveness test, and product finalization. The study's results stated that digital media was feasible and effective in improving the quality of interactive student learning.

**Keywords:** Digital media, digital media, student characteristics

### Introduction

Advances in information and communication technology in education have an essential role in improving the quality of education in the learning process (Li et al., 2018; Paderanga, 2014; Widjajarto et al., 2019). In addition, it can increase the effectiveness and efficiency of the learning process to achieve educational goals on reliable human resources that can be created through education (Astuti et al., 2017). Teachers are currently facing more significant challenges than in the previous era. This is essential in learning activities because it is expected to develop and prepare students' potential to have 21st-century skills. Skills in the 21st century that imply and develop learning innovations have academic foundations, namely components of life and career skills, learning and innovation skills, information, media, and technology skills as student learning products (Muhali, 2019). In implementing learning, the need for developing science and technology can produce various kinds of technology-based learning media that are efficient, effective, and according to requirements (Brown & Green, 2018; Guinibert, 2020; Khan, 2021; Pérez et al., 2017; Pimmer et al., 2016; Ruhimat et al., 2020; Suartama et al., 2020).

Changes are a trend in all activities, especially in education, from the health sector to the economy. However, learning is still dominant in giving assignments as learning activities are not focused on transferring knowledge and developing students' character. Character development provides an initial basis for understanding that can shape students' personalities (Shoshani, 2019). In learning activities, media use is only glued to the thematic books of the 2013 curriculum without paying attention to learning media.

Learning Pancasila Education and Citizenship (PPKn) encountered difficulties in understanding the material because it only memorized the theory in learning, so it wasn't easy to understand in real life. In addition, there is a lack of creativity in developing media that can stimulate students' interest in learning. The transfer process in science is still dominant in giving assignments, so in shaping teacher attitudes, they do not know an excellent way to explain using various media. Media can be used in the classroom as a learning strategy for developing student characteristics (Widiastika et al., 2021). Citizenship Education plays a vital role in instilling the good attitudes that students need to apply to the practice of the Pancasila student profile. Pancasila students embody Indonesian students as lifelong students who have global competence and behave according to the values contained in Pancasila (Wulandari, 2021). Learning, of course, requires attitude results that can be implemented

related to technological developments in providing opportunities for students to interact with various objects (Hubers et al., 2020).

The media can support solving existing problems. Digital media can be used to facilitate a student-centred teaching and learning process. Digital media can be used anywhere and anytime without limiting space and time (Ningsih & Adesti, 2019). Digital media will be developed as facilitation or service that provides electronic information and educational content to acquire knowledge (Aripin, 2018). Digital media makes learning portable, complementing education with technology (Bhardwaj & Jain, 2015).

The many features provided in this product and the contents of the subject matter in the book become learning videos with a game menu, presenting results for a presentation that can be done in digital media. Digital media has independent characteristics and provides opportunities for students to understand education in the 21st century (Schuck et al., 2017). Researchers developing this product prepare a game menu, so students do not get bored too quickly using the media. Therefore, the development of media in learning can help interactive learning activities by developing varied videos that can increase the enthusiasm for learning and motivate students to deep understanding. This will result in student learning outcomes and train students' learning independence. In the development of digital media, this can be the answer to the problems above.

### Methods

The research method used is Research and Development (R&D). Research and development (R&D) was a method used to develop a new product or improve an existing product for accountability (Salim & Haidir, 2019). Research and development is a product to enhance existing products or improve them to become better, more efficient, and effective in implementing learning in schools. In Digital media Research and Development in Elementary School Civics (SD) Learning Content, theme 7, researchers used the ADDIE stage development model consisting of five main steps: Analyze, Design, Development, Implementation, and Evaluation.

Data collection techniques used by researchers are observation, interviews, and questionnaires. The data collection instrument used by the researcher was a questionnaire. Questionnaires were collected through expert testing, and fourth-grade elementary school students were in the individual test stage, small group test stage, and field test stage. The instrument lattice is shown in table 1.

Table 1. Grid of Questionnaire Instruments

No.	Aspect	Indicator	Item Number	Number of Items
1	Display Quality	App display size	1	1
		User-friendly buttons	2	1
		Professional button placement	3	1
2	Media Content	Conformity of content with essential competencies.	4	1
		Conformity of content with the objectives to be achieved.	5	1
		Conformity of content with the concept of learning.	6	1
		Conformity of content with student characteristics.	7	1
		Conformity of the content with the theme of the media.	8	1
		Compatibility between pages.	9	1
3	Media Design	The suitability of the material with pictures and writing	10	1
		Attractive text colour, typeface, and font size	11	1
		The suitability of media presentation with student characteristics.	12	1
		Image quality	13	1
		Easy to understand language	14	1

4	Program	Easy app installation	15	1
		Ease of installing applications from the system	16	1
		Ease of application button function	17	1
		Ease of operation of digital media applications	18	1
		Musical instruments support the media	19	1
<b>Total Questions</b>			<b>19</b>	

The instrument is one of a series of research that consists of three parts, namely the indication of filling, the identity of the respondent and the items of the assessment statement using a Likert scale. The development will use the data on this instrument for research needs without any purpose beyond these needs.

The data analysis technique used by the researcher to process the data obtained from the product development validation questionnaire from the expert trial, one-to-one, small group, and field try-out is quantitative descriptive statistics. Researchers perform calculations to determine the quality of the product to be developed. The assessment uses intervals of 1-4, with information: 1 = Less Good (LG), 2 = Fairly Good (FG), 3 = Good (G), and 4 = Excellent (E).

### Results and Discussion

The research was carried out in semester 1 of the 2021/2022 academic year, from September 2021 to January 2022. The development of this product uses the development model from ADDIE, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. In addition, the development of this product has carried out a trial phase and an assessment from experts and users (fourth-grade elementary school students). The results of trials and assessments indicate that the developed product is feasible.

The development product developed by digital media researchers for PPKn elementary school learning in Grade IV Elementary School with the theme "The Beauty of Diversity in My Country" This media is called digital media because the manufacturer of this media utilizes Unity Software which is packaged in the form of an application and the use of a video maker. With features of learning materials, application usage instructions, sounds, pictures, and games. In addition, this digital media contains ethnic and religious diversity, specifically for the fourth-grade elementary school material.

Based on the steps of developing research methods, the results are as follows: Digital media in the Civics Elementary School lesson content in the Civics theme with the theme The Beauty of Diversity in My Country with material on ethnic and religious diversity in grade IV elementary school. The developed digital media was declared suitable for use based on validation by material experts, validation of linguists, validation of media experts and test results by teachers and student responses. Tables 2 and 3 below are the assessments of material experts based on the instruments used at the expert review stage.

Table 2. Results of the Material Expert Recapitulation of the First Researcher Member

Aspect	Percentage Score (%)
Material Presentation	81,25
Material Suitability	91,67
Serving eligibility	75
<b>Average Score</b>	<b>83,33</b>

Table 3. Results of the Recapitulation of Material Experts for the Second Researcher Member

Aspect	Percentage Score (%)
Content Eligibility	100
Material Suitability	93,3
Continuity of Media Content Presentation	92
<b>Average Score</b>	<b>94</b>

Based on table 2, digital media products get results of 83.33%. Therefore, by material experts, it can be categorized as excellent. Then in table 3, getting a result of 94% by material experts is categorized as excellent. Finally, the linguistic research results are presented in tables 4 and 5.

Table 4. Results of the Recapitulation of Linguists Experts for the First Researcher Member

Aspect	Percentage Score (%)
Language Eligibility	100
Language Collapse	100
Language Usage	100
Language Accuracy	100
Sentence Effectiveness	100
Language Compatibility	100
<b>Average Score</b>	<b>100</b>

Table 5. Results of the Recapitulation of Linguists Experts for the Second Researcher Member

Aspect	Percentage Score (%)
Language Conformity with Rules	95
Vocabulary Match	100
<b>Average Score</b>	<b>97,5</b>

Based on table 4, digital media products get results of 100%. By linguists, it can be categorized as excellent. Based on table 5, the digital media product by the second researcher got a result of 97.5%. Again, by linguists, it can be categorized as excellent. Meanwhile, the research results by media experts are presented in Tables 6 and 7.

Table 6. Results of the Media Experts' Recapitulation of the First Researcher Members

Aspect	Percentage Score (%)
Display Quality	96,88
Media Content	100
Media Design	100
Media Program	100
<b>Average Score</b>	<b>98,21</b>

Table 7. Results of the Media Experts' Recapitulation of the Second Researcher Members

Aspect	Percentage Score (%)
Media Compatibility	100
Content Compatibility	100
Image Quality	95
Music Instrument	100
Ease of Operation	100
Attractive Colors and Letters	100
Material Suitability	100
Media Presentation Suitability	95
<b>Average Score</b>	<b>97,3</b>

Based on table 6, digital media products get results of 98.21% by media experts can be categorized as excellent. Based on table 7, the digital media product by member two got a result of 97.3% by media experts can be categorized as excellent.

After validating the product by experts, the next stage is testing for students. As for the results of one to one, small group, the field tries out trying out conducted by one teacher and four students by research member one and three students by researcher two at one to one, then in a small group conducted by five students by members

researcher one and five students by research members two. While the field try out was carried out by 11 students by research member one and nine by research member two, the results of the questionnaire recapitulation are presented in tables 8,9,10, 11, 12 and 13.

Table 8. Results of the one-to-one trial recapitulation of the First Researcher Member

No	Respondent	Total	Percentage (%)
1	GA (Teacher)	10	100
2	DHI	10	90
3	ALF	10	87,5
4	SB	10	77,5
5	RA	10	92,5
<b>Average Score</b>		50	89,5

Table 9 Results of the one-to-one trial recapitulation of the second research member

No	Respondent	Total	Percentage (%)
1	DH	10	94
2	MIHK	10	96
3	ABZ	10	98
<b>Average Score</b>		30	96

Table 8 shows that digital media by research members gets an average one-to-one assessment percentage of 89.5%, which means excellent. Then based on table 9, digital media products by the second member get a percentage of assessment at the one-to-one stage of 96%, which means excellent.

Table 10. Results of the small group trial of the First Researcher Member

No	Respondent	Total	Percentage (%)
1	ALY	10	95
2	KH	10	99
3	AA	10	97
4	RA	10	98
5	FT	10	96
<b>Average Score</b>		50	97

Table 11. Results of the small group trial of the Second Researcher Member

No	Respondent	Total	Percentage (%)
1	HMM	10	96
2	AFN	10	97,5
3	CTLY	10	95
4	KHD	10	96
5	HBR	10	97
<b>Average Score</b>		50	96,3

Table 10 shows that digital media by research members gets an average percentage of the small group assessment of 97%, which means it is excellent. Then, based on table 11, the digital media product by member two gets a percentage of assessment at the small group stage of 96.3%, which means excellent.

Table 12. Results of the Trial Field Trial Recapitulation of the First Researcher Member

No	Respondent	Total	Percentage (%)
1	MRF	10	95
2	HMM	10	96
3	AFN	10	95
4	KHD	10	97
5	HBR	10	98

No	Respondent	Total	Percentage (%)
6	CTLY	10	95,5
7	ALY	10	97
8	KH	10	95
9	AA	10	99
10	RA	10	96
11	FT	10	97
<b>Average Score</b>		110	96,4

Table 13. Results of the Trial Field Trial Recapitulation of the Second Researcher Member

No	Respondent	Total	Percentage (%)
1	DHI	10	97
2	ALF	10	96
3	SB	10	95
4	RA	10	94,5
5	DH	10	98
6	MIHK	10	97
7	ABZ	10	95,5
8	MELF	10	96
9	AZK	10	96
<b>Average Score</b>		90	96,2

Based on table 12, digital media gets an average percentage of the field try out an assessment of 96.4%, which means it is excellent. Then based on table 13, the second member's digital media product got a percentage of the assessment at the field try-out stage of 96.2%, which means excellent.

Learning in Elementary Civics emphasizes the formation of attitudes, morals and characters that students need to learn early on through practical, creative and fun learning. Learning that creates a pleasant atmosphere in learning is indeed very suitable to be applied in PPKn elementary school learning. Using digital media can be said to be fun for elementary school-age children to be interested in learning. Involving and using products between students in learning digital media will make them happy so that they are carried away from the mission of digital media. In this case, the teacher can take advantage of digital media products to improve the moral formation of students. Then this becomes very important in increasing the moral formation of students through PPKn elementary school learning with digital media.

Digital media makes it easy and can be operated on various android devices. The main menu display displays the features of students being able to choose various learning materials according to student needs. Digital media can be used for various sub-themes, namely sub-theme 1 Diversity of ethnic groups and religions in my country. In the sub-theme of Diversity, Ethnicity and Religion in My Country, there are 3 PPKn elementary school students: a. Learning 3 Ethnic Diversity, b. I was learning 4 Language Diversity, c and learning 5 Religious Diversity. Each sub-theme has six lessons, including three primary school Civics lessons in my country's Ethnic and Religious Diversity sub-theme. Civics material will teach students about ethnic and religious diversity in the community and daily life in the surrounding environment.

Based on the relevant research results, digital media is effective for improving the quality of student learning. Digital media is an interactive learning media on the content of Pancasila Education and Citizenship. The results of this research and development are digital media as a learning medium to improve the quality of learning for elementary school students. Digital media can be utilized through various devices with an internet network—using digital media for learning Pancasila and Citizenship Education.

Instructional as a structured combination includes human elements, materials, facilities, equipment, and procedures that influence each other to achieve learning objectives (Espinoza & Taut, 2020; Jarudin et al., 2020; Noroozi et al., 2020; Star et al., 2013). Furthermore, it was stated that the humans involved in the instructional system consisted of students, teachers, and other personnel, such as laboratory personnel. Materials, including books, blackboards and chalk, photography, slides and films, and audio and videotapes. Facilities and equipment

consist of classrooms, audio-visual equipment, and computers. Procedures include schedules and methods of delivering information, learning practices, exams, etc. So, it can be concluded that instruction is a process or learning activity that leads to the achievement of previously planned goals to develop knowledge, skills, attitudes and learning experiences for participants. educate

The instructional process requires the management of instructional components and strategies, including technology and media that can be used as tools to implement instruction. Instructional strategies include presentations, demonstrations, exercises and drills, tutorials, discussions, group learning, games, simulations, discovery, and problem-solving. Instructional strategies must be well designed by considering the use of appropriate technology and media according to the material's characteristics, the learners' characteristics, or the types of learning environments (Bahtiar & Nursasi, 2019; Baquier Orozco et al., 2020; Darsham & Hassan, 2017; Lee et al., 2019; Seechaliao, 2017; Woodill, 2011).

Instructional strategies are divided into two categories, namely teacher-centred and student-centred strategies. Of the two categories of strategies, the teacher is the key to determining what instructional strategy will be designed. What differs between the two is the focus or purpose of the strategy. In general, what the teacher has designed determines instructional success. In designing instruction, we can decide how well students follow and how effective the instruction depends on the right strategy. The following are some learning conditions that require the right strategies and media for effective learning.

Student-centred strategies focus on guiding and directing students. However, teachers are still responsible for planning and developing student-centred learning and learning. The teacher's role is to facilitate learning, individually or in small groups, and help students stay focused on learning outcomes.

### Conclusion

The results of the study resulted in a digital media product based on PPKn Class IV Elementary School with the theme 7 "The Beauty of Diversity in My Country" sub-theme "Diversity of Ethnicities and Religions in My Country". The implications of the research results for students, especially fourth grade elementary school students to utilize learning media in improving the quality of learning. The quality of learning today needs special attention because many students are too focused on online games. It is necessary to facilitate students with game-based media that provide education. Digital media is a shared learning media about improving the quality of learning for elementary school students. The purpose of digital instructional is to improve the learning quality of fourth grade elementary school students. The results of this study emphasize that there is a need for similar activities to continue to share information about improving the quality of learning, especially for elementary school students who are easily influenced by the learning environment.

The advantages of this digital media include a) It is suitable for the category of elementary school students related to information on Pancasila Education and Citizenship; b) Easily accessible via various hardware devices; c) Can be used anytime and anywhere; d) Can be a reference for all students in improving the quality of learning in accordance with the norms of Pancasila. Meanwhile, the weaknesses of digital media need to be added to conduct independent assessments so that students can find out directly about improving the quality of their learning. Further research is needed to complete the weaknesses of the digital media.

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