



## **Instill Character Education During Online Learning with Developing Whiteboard Animation Proclamation-Based**

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**Abstract:** Learning activities during pandemics present new challenges in Indonesian education, especially in applying character education in elementary schools. This study aims to develop appropriate and effective learning media to instill character education during online learning. The learning media developed is in the form of whiteboard animation proclamation-based. This development consists of nine stages of development of Dick and Carey. Research data was obtained through observation, interviews, and questionnaires. The feasibility of the Whiteboard Animation Proclamation-Based results was obtained through a product assessment questionnaire from a material expert, a media expert, a language expert, and classroom teachers. Meanwhile, the test results were obtained from a response questionnaire to 50 fourth-grade students in Cimahi. The validation results show that the Whiteboard Animation Proclamation-Based is feasible from assessing the material aspect with an average of 4.45. The media aspect is also considered very feasible with an average of 4.67, and the language aspect is feasible with an average of 4.54. The results obtained from practitioners also get very decent criteria with an average of 4.67. The results of small and large-scale trials received an average of 100% with very good criteria. This development concludes that the Proclamation-Based Whiteboard Animation developed is very good enough to be used as a learning media to support online learning in elementary schools.

**Keywords:** whiteboard animation, proclamation, character education, online learning

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### **Introduction**

The Covid-19 pandemic has led to the closure of educational institutions worldwide. The transformation from conventional to online learning raises various obstacles, such as the unpreparedness of students in learning which causes a decrease in student learning outcomes (Winata, 2021). Various studies have created learning activities or tools that can be used independently and are more attractive to students during online learning. It is such an action to increase the readiness of education providers in implementing online learning, especially for countries that are inured to implementing conventional face-to-face learning, such as Indonesia, so that there is no significant decrease in students learning outcomes.

Three learning outcomes domains need to be mastered by students, namely the cognitive domain, psychomotor domain, and affective domain (Fuadi, 2018). The affective domain relates to emotional aspects, such as feelings, interests, moral values, character, etc. The affective domain is the domain that has the most obstacles during the implementation of online learning (Yunus & Samsi, 2021). The affective domain is categorized into five parts (Dimiyati & Mudjiono, 2009), namely 1) Acceptance: paying attention to something; 2) Participation: the act of joining others in learning ; 3) Assessment and Attitude Determination: which refers to the importance of binding ourselves to particular objects or events with accepting, rejecting or ignoring; 4) Organization: refers to the joining of different values and attitudes that cause internal conflicts; 5) Shape in a pattern of life: refers to a person's character.



Character needs to be accustomed to instilling the value of life (Rokhmani & Suhardi, 2021). The Ministry of Education and Culture has fostered character values through character education programs. Character education instills character values into school members, including knowledge, awareness or willingness, and actions to implement these values towards God, oneself, others, and the environment (Dewi, 2021). Eighteen-character values need to be taught in elementary schools; one of them is patriotism (Annisa, 2019). Instilling the value of patriotism is an urgent matter to be inured in schools today due to the low patriotism character in elementary school (Sukraningsih & Wardani, 2020). Therefore, we need learning media to help teachers instill students' patriotism during online learning.

Based on a preliminary study conducted in a fourth-grade elementary school at SD N Karangmekar Mandiri 3 and SD N Kartika XIX-4, the teacher said no learning media was used to support online learning; they only provided scanned documents and materials for students. The teachers reported that this was a weakness that ultimately led to learning loss for students, especially in teaching the character of patriotism. It is because the teaching materials provided have not been able to provide a concrete picture of the learning given to students. The teacher has overcome this several times by making learning videos, but it is not optimal. The videos made by the teacher have not been fully able to attract the attention of students to learn because most of the learning videos made also present text in the video. Meanwhile, fourth-grade elementary school students are in a concrete operational stage (Malik & Marwaha, 2018), which requires an accurate picture of the material being studied. Therefore, teachers expect an attractive learning media that can help attract students' interest in learning and instill students' character of patriotism.

The preliminary study results show that students' patriotism is low, especially in online learning during the pandemic. This can be seen from the survey results, which show that only 38% of students choose Indonesian products other than abroad, only 47% of students are willing to show their courage, 78% of students have not shown a self-sacrificing attitude, and 49% of students have not shown love for nation and state.

One of the best interactive multimedia that can improve the quality of learning for elementary school students is whiteboard animation (Li, Lai, & Szeto, 2019). This whiteboard animation aims to motivate students in learning because it looks more attractive. In addition, whiteboard animation can be a medium to instill students' patriotism through its values.

Several studies reveal the benefits of whiteboard animation in learning. Suhroh, Cahyono, & Astuti (2020) stated that whiteboard animation helps students improve their creative thinking skills. Furthermore, Purwaningsih & Anggraeni (2021) stated that whiteboard animation is suitable for learning media. Research conducted by Li, Lai, & Szeto (2019) also stated that whiteboard animation is appropriate for online and offline teaching and learning activities. Likewise, Turkay's (2016) research states that whiteboard animation can be used to improve student learning outcomes.

Referring to the preliminary study, it is necessary to develop learning media to improve learning quality, motivate students and improve students' patriotism. Therefore, researchers developed whiteboard animation as learning media for fourth-grade elementary school. Indifferent to previous research, this development was compiled material based on the Proclamation of Independence of the Republic of Indonesia. This development aims to create a whiteboard animation that completes the requirements not only based on the experts' judgment (media, material, and linguistics) but also on teachers' and students' responses during field testing.

### **Methods**

This study adopts the Dick and Carey development model. This development model was chosen because it describes the development steps in more detail. This research carried out nine stages: need analysis; learning analysis; learner analysis and context; formulating goals; developing research instruments; developing learning strategies; developing and selecting teaching materials; conducting formative evaluation; and finishing the final product (Dick & Carey, 2005).



Figure 1. The Research and Development Stages

The data in this development are primary, in the form of 1) expert validation results; 2) the results of the teacher's response; 3) the results of students' responses. The whiteboard animation proclamation-based must be tested for its feasibility so that it is suitable for use by elementary school students. The feasibility assessment of whiteboard animation proclamation-based was carried out through feasibility tests. The whiteboard animation proclamation-based feasibility test consists of expert testing and product use trials that can demonstrate the appropriateness of the product being developed. Testing the use of whiteboard animation proclamation-based consists of teachers' and students' trials. Development data were collected using a questionnaire technique.

The product development eligibility was assessed by one material expert (social science expertise from Universitas Pendidikan Indonesia), one media expert (digital media expertise from Universitas Pendidikan Indonesia), one linguistic expert (children language expert from IKIP Siliwangi), and two fourth-grade teachers (teachers' class IV of SD N Karangmekar Mandiri 3 and SD N Kartika XIX-4). Meanwhile, the trial involved 50 fourth-grade elementary schools, SD N Karangmekar Mandiri 3 and SD N Kartika XIX-4.

The data analysis technique was carried out when analyzing the results of the needs and feasibility study of the whiteboard animation proclamation-based. The data analysis technique in the need study is carried out by qualitative descriptive analysis. The qualitative descriptive analysis includes data reduction, presentation, and conclusion (Sugiyono, 2010). The data analysis technique used to determine the feasibility of whiteboard animation proclamation-based is carried out by quantitative descriptive analysis. The data analyzed included media feasibility data from media experts and material experts and field trials. Table 1 shows the conversion of quantitative data to qualitative data on a scale of 5.

Tabel 1. Feasibility Category

Average Score Range	Predicate	Category
$X > M_i + 1,8 SB_i$	A	Very Good
$M_i + 0,6 SB_i < x \leq M_i + 1,8 SB_i$	B	Good
$M_i - 0,6 SB_i < x \leq M_i + 1,8 SB_i$	C	Moderate
$M_i - 0,6 SB_i < x \leq M_i - 1,8 SB_i$	D	Less
$X \leq M_i - 1,8 SB_i$	E	Poor

## **Results and Discussion**

### **Result**

The needs analysis in this study was carried out through observation, interviews, and document analysis. The needs analysis was brought at elementary schools in Cimahi which are SD N Karangmekar Mandiri 3 and SD N Kartika XIX-4. It was accomplished at the beginning of the 2022 academic year.

The observation result shows that online learning was carried out through zoom meetings and WhatsApp groups. The teaching material used during online learning was the material scanned by the teacher, which comes from the teacher and students' book of curriculum 2013. Sometimes, the teacher also explains using voice notes through the WhatsApp group. The interviews with teachers and students showed that the learning process during online learning did not attract students' interest—those impacted students for being late for homework and collecting assignments given by the teacher. The analysis of student learning outcomes strengthens the data above. There was a decrease in learning outcomes by 42% during online learning. The results of observations, interviews, and document analysis data were obtained on three things: 1) the use of learning media, 2) the patriotic character of students, and 3) the need for interactive multimedia for online learning. The use of learning media is determined by perceiving the curriculum and students' abilities. Students have difficulty understanding the material during online learning, and teachers have difficulty integrating character education. Several indicators can be taught to students in the curriculum competency for character education. One of them is patriotism. The preliminary study also finds that students' patriotism is low. Data show that only 38% of students choose Indonesian products other than abroad, only 47% of students are willing to offer their courage, 78% of students have not shown a self-sacrificing attitude, and 49% of students have not shown love for the nation and state.

The next step is to analyze the children. At this stage, the researcher analyzed the characteristics of fourth-grade elementary students through a depth observation of the curriculum and learning styles. After that, the researcher entered the material analysis stage. This activity was in the form of determining and organizing relevant material given to fourth-grade elementary students to instill patriotism and meet the needs of interactive multimedia in the form of whiteboard animation, especially during online learning. The material chosen is related to the proclamation of independence of the Republic of Indonesia; this refers to the curriculum studies that have been carried out. The multimedia developed in this study is called whiteboard animation proclamation-based.

Furthermore, the researcher entered the design stage. Based on the results achieved in the previous stage, the researcher designed the whiteboard animation proclamation-based integrated into social science subjects. The material chosen was the proclamation of independence of the Republic of Indonesia, which was following the cultivation of the patriotic character of fourth-grade elementary students. The steps are as follows: (1) determine the material to be taught; (2) determine the indicators of patriotism that will be implanted, (3) determine the format of learning tools related to content design; (4) determine the types of games related to teaching materials and the cultivate the character education; (5) determine the evaluation to be given. The initial product development stage is carried out by designing a whiteboard animation proclamation-based consisting of: 1) events before the proclamation; 2) the meaning of the proclamation of independence; 3) games; and 4) evaluation. Following the chosen theme, these designs are arranged as teaching material for the proclamation of independence which contains patriotism values. This development arranged all aspects according to the characteristics of fourth-grade elementary students. The aim is that the material contained is more contextual for students.



Figure 1. Main Menu of Whiteboard Animation Proclamation Based.

The main menu page is the initial display when we enter the whiteboard animation proclamation-based. The main menu page is equipped with a button feature to select the next page.



Figure 2. Display Menu of Events before the Proclamation

The menu "Event Before the Proclamation" contains materials that will be studied in the whiteboard animation proclamation-based. The selection of materials is related to the Curriculum 2013 for fourth-grade elementary students and it is also related to the character of patriotism.



Figure 3. Display Menu of The Meaning Proclamation

Menu "The Meaning of The Proclamation" contain studies related to what value we can learn from the Proclamation Day. In this section, the researcher inserts the character values of patriotism that need to be instilled in fourth-grade elementary students.



Figure 4. Display Menu of The Game.

The menu "Games" contains questions related to the material studied and questions to check the cultivation of patriotism in students.

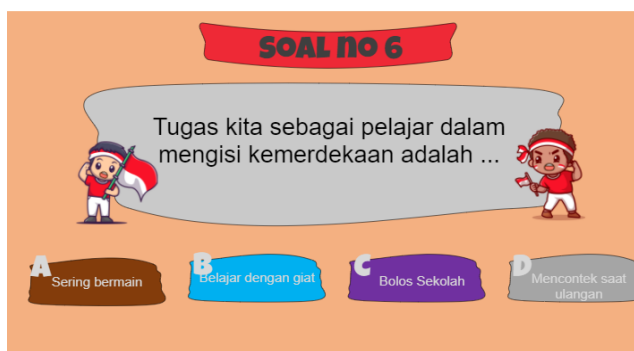


Figure 5. Display Menu of Evaluation.

The evaluation page presents questions that students can try to find out the extent of their understanding of the material that has been studied. This evaluation page displays the "True" or "False" answers to show how practical and effective the whiteboard animation proclamation-based is.

After the product was developed, the researcher tested the feasibility of the product through experts (material expert, media expert, and linguistic expert). The media expert validated the initial product of the whiteboard animation proclamation based to determine the appropriate level of media quality from media experts. The following page displays a table of product rating scale results according to media experts.

Tabel 2. Result of Production Assessment by Media Expert

No.	Aspects	Indicator	Mean Score	Criteria
1	Consistency	Spacing and letters	5	VG
		Layout	5	VG
		Writing	5	VG
2	Organization	Presentation	5	VG
		Ease of use	5	VG
3	Attractiveness	Menu Design	4	G
		Content Design	5	VG
		Colour	4	G
		Interests and Motivation	5	VG
4	Alphabet	Image Display Quality	5	VG
		Font Type	4	G
		Font Size	4	G
Mean			4.67	VG

The result conversion of media experts' product rating scale score is 4.67 with "Very Good" criteria. Media experts also provide suggestions for media revision. The first suggestion is in the main

display menu that needs to be added information regarding the target user (what class this media is used for).

A material expert validated the initial product of whiteboard animation proclamation-based to determine the appropriateness of the quality of the material and its suitability for fourth-grade students. The following table shows the results of the product rating scale according to material experts.

**Tabel 3.** Result of Production Assessment by Material Expert

No.	Aspects	Indicator	Mean Score	Criteria
1	Substance	Suitability of material with learning objectives	4	G
		The suitability of the story with students' characteristics	4	G
2	The level of learning	Clarity of competencies that students must achieve	4	G
		Ease of material to understand	4	G
		The breadth and depth of the material	4	G
		Teacher and student's interactivity in learning	5	VG
3	Patriotism Character	Meet the indicator of patriotism	5	VG
4	Usefulness	Benefits for students	5	VG
		Benefits for teachers	5	VG
Mean			4.45	G

The result conversion of material experts' product rating scale score is 4.45 with "Good" criteria. Suggestions from material experts are that the instructions for the user must be operational with what teachers and students are doing; settings that need to be clarified; some character values of patriotism need to be strengthened.

Linguists validated the initial product of the whiteboard animation proclamation based to determine the level of appropriateness of language quality and its suitability for fourth-grade elementary school students. Table 4 is the result of the product rating scale according to linguistic material.

**Tabel 4.** Result of Production Assessment by Linguistic Expert

No.	Aspects	Indicator	Mean Score	Criteria
1	Language Conformity	Language conformity with EYD	5	VG
		Suitability of the language used	4	G
2	Use of Language	The sentences used are not biased	4	G
		The effectiveness of the sentences used	4	G
		Clarity of meaning of words	5	VG
		Word selection accuracy	5	VG
		Clarity of sentences	4	G
		The charm of style	5	VG
3	Language Readability	The accuracy of using foreign terms	5	VG
		Letter clarity	4	G
		Clarity of symbols	4	G
		Clarity of command	5	VG
		Ease of reading comprehension	5	VG
		Reading text wrinkles	5	VG
		Language compatibility with supporting images	4	G
Mean			4.54	VG

The result conversion of linguists' product rating scale score is 4.53 with "Very Good" criteria. Suggestions from a linguistic expert are to 1) pay attention to and check the writing system, especially punctuation and writing of foreign words; 2) pay attention and check the accuracy of diction and use of task words. Based on the assessments of media experts, material experts, and linguistic experts the whiteboard animation proclamation-based was declared very feasible and ready to be used for research by considering suggestions from experts. After being tested by experts and getting input, the product is revised until it is ready to be tested in school.

After the product is revised based on experts' input, the product is then tested on teachers and students to get wider input from teachers and students as direct users. Teachers and students carry out the learning process using whiteboard animation proclamation-based. After finishing the lesson, the teacher is asked to fill in a response scale, and students are asked to fill out a response questionnaire to

the whiteboard animation proclamation-based. Below are the results of the teacher response scales.

**Tabel 5.** Result of Teachers Assessment by Teachers

No.	Indicator	Mean Score	Criteria
1	Conformity with the character being developed	5	VG
2	The suitability of the whiteboard animation proclamation-based	5	VG
3	Clarity of study instructions	4	G
4	The breadth and into the material	4	G
5	Suitability with students' characteristics	4.5	VG
6	Completeness of the elements of the story	5	VG
7	Narrative text quality	5	VG
8	Media display quality	5	VG
9	Overall physical appearance criteria for media	4.5	VG
		4.67	VG

The result conversion of the teacher response scale is 4.81 with a "Very Good" criteria. Suggestions from the teacher are that the instructions for making whiteboard animations proclamation-based should be clarified. Based on the teacher and student response conversion, it can be seen that the whiteboard animation proclamation-based is declared highly qualified, with 13 student answers stating "Yes" for all statements and 2 students stating "No" for all statements. Thus, the whiteboard animations proclamation-based can be used for the next stage of development by revising it according to input.

**Discussion**

The low value of patriotism is caused by various factors, one of the most influential factors is the advancement of technology and information in this era of globalization. The impact of technological advances makes various information easily accessible by students. The flow of information from abroad and domestically cannot be filtered so that students receive information instantly without being filtered out at all, be it positive or negative information. This easy flow of information is misused by students to open content that they should not be allowed to access in elementary school students. This results in a decline in morals, behavior, speech, and attitudes of students towards a sense of love and pride for the homeland, especially for the younger generation. The decline in the national spirit can be seen in the attitude and speech of students when communicating with teachers or older people. Students no longer show respect and respect in language. Students also do not use Indonesian or local languages properly and correctly. The rapid influence of technology and information affects the learning process. The more sophisticated the gadgets used by students, it presents the variety of applications that are easily accessed by students. This makes students complacent and prefers to play online games or social media applications rather than reading knowledge books or getting to know traditional games. Students prefer using various social media applications rather than doing useful things (Erbas, Cipuri, & Joni, 2021).

This research development was conceived to improve the quality of online learning in elementary schools due to the COVID-19 pandemic. This refers to the research, which states that the Covid-19 pandemic has disrupted the conventional learning process (Ali, 2020), so a solution is needed to answer these problems. One solution that can be applied is to prepare valid and effective learning media for teachers and students (Makawawa, Mustadi, Septriwanto, Sampouw, & najoan, 2021). The learning media most needed by teachers and students during online learning is interactive multimedia (Prabawa & Restami, 2020). Interactive multimedia is designed according to the user's needs to be interested in learning (Alessi & Trollip, 2001). Video media can present more interesting and interactive material so that it can create effective learning in conveying moral messages and character education to students as implemented in this study, which aims to internalize patriotism values (Hasan, 2016). Research results (Basori, 2016) show that learning media, especially interactive learning media can help the teaching and learning process so that the meaning of the message conveyed becomes clearer and learning can be achieved effectively and efficiently (Dwijayani, Putra, & Jayantika, 2019). One renewable interactive multimedia is whiteboard animation (Rijal & Azimi, 2021). Furthermore, before being used in learning, the whiteboard animation proclamation-based must be tested for its eligibility.

The suitability of the whiteboard animation proclamation-based as a learning media to instill patriotism in fourth-grade elementary students based on the assessments of media, material, and linguistic experts. Besides assessing product quality using a rating scale, the experts also provided



comments and suggestions for improving whiteboard animation proclamation-based. The comments and suggestions are provided as a guide for improving the quality of the whiteboard animation proclamation-based so that it is ready to be used in field testing. The whiteboard animation proclamation-based is prepared to attract students' interest to enhance the patriotism of fourth-grade elementary students. Media layouts are well designed, illustrated and well laid out, and adapted for elementary school students (Anggito & Sartono, 2022). The whiteboard animation proclamation-based that was developed contains a choice of words, language, and color combinations, which are adapted to the characteristics of students (Sabrin, Soeharto, & Kurniadi, 2019). This makes students more enthusiastic about learning. Learning media is needed to support cultivating students' character (Wisada, Sudarma, & Yuda, 2019).

The use of whiteboard animation has a positive and significant effect on cultivating character education. Research shows several advantages of using whiteboard animation (Ferani, Edok, & Satria, 2022), such as: 1) the use of whiteboard animation can motivate students to learn happily, freely, actively, and productively so that psychological barriers that hinder students can resolve; 2) the use of whiteboard animation provides a concrete picture related to the form of cultivating character education in everyday life so that the material presented will be easier for students to understand; (3) students are trained in various matters, or experiences, such as daring to express opinions and accepting differences of opinion and daring to present their work in front of the class; (4) the teacher changes the function of the transmitter of knowledge to become a facilitator, dynamist and motivator.

### **Conclusion**

Based on the validation and field trial results, whiteboard animation proclamation-based can be declared feasible for the material, media, and language use. The menu of the proclamation-based whiteboard animation consists of 1) events before the proclamation; 2) the meaning of the proclamation of independence; 3) games; and 4) evaluation. The whiteboard animation proclamation-based is arranged according to the characteristics of fourth-grade elementary school students. Its development presents concrete animations that are attractive to students and make it easier for them to learn. Inculcating patriotism character values in whiteboard animation proclamation-based will make students enthusiastic and eager to learn. Thus, it can be concluded that whiteboard animation proclamation-based has proven to be appropriate as an online learning media for fourth-grade elementary students.

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