

Development of Interactive Video and Wordwall Evaluation Media on Pancasila in Elementary School

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ABSTRACT

In the world of education, teachers as educators are expected to be able to utilize technology in classroom learning activities. The study aims to develop interactive learning videos and wordwall evaluation media on Pancasila SD material. This study uses R&D steps with ADDIE stages (analyze, design, development, implementation, evaluation). Data collection instruments use questionnaires and interviews. Validation through questionnaires assesses aspects of material, media and language. The results of the questionnaire distribution validation assessment by assessing aspects of material, media and language obtained an average value of the material aspect of 93% with a very good category, the media aspect assessment of 91% with a very good category, and the language aspect questionnaire validation assessment of 92% very good category. The results of student interviews felt very helped by the learning video media and the fun wordwall evaluation media and aroused students' enthusiasm for learning. The results of the interactive learning video and wordwall evaluation media trials have met the valid, practical and feasible categories for teachers and students to implement in the learning process in the classroom.

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INTRODUCTION

Pancasila education is one of the most important subjects in shaping the character of the young generation of Indonesia. The application of Pancasila values at the elementary school level is very important to do (Septiani et al 2022). The purpose of learning civic education in schools is to shape the character of citizens in accordance with the nation's ideology who have a sense of nationality, love for the homeland, are responsible and democratic (Alldred et al, 2019). Civic education plays an important role in preparing the younger generation to face the challenges of the global world, so that the next generation of the nation can always uphold values that are in accordance with the Indonesian nation (Estelles et al, 2020).

Pancasila education is a subject that contains aspects of nationalism and patriotism as citizens, this aspect will later shape students to become responsible and active citizens (Siregar et al, 2024). Pancasila education at the elementary school level has an important role in instilling the noble values contained in the five principles of Pancasila to students. However, the challenges in the learning process of Pancasila education in elementary schools are often the lack of student interest, teaching methods that tend to be monotonous, and the lack of innovative learning media.

The use of technology in education has brought about fundamental changes in the way teachers teach, the way students learn, and the way they manage classes (Monalia et al, 2021). The use of technology can encourage teachers to innovate in learning, and make it easier for teachers and students to achieve learning goals (Nento et al, 2023). Learning supported by technology has better potential for understanding the material (Wekerle et al, 2020). Learning with technology can make it easier for students to understand the material being studied.

In this very sophisticated era, the field of education has experienced very rapid progress. Educators are required to be able to use and utilize sophisticated technology. The learning process is the main foundation in the development of students' attitudes, knowledge, and skills. Educators or teachers are important factors that influence effectiveness in the learning process. A teacher must be able to innovate and be creative in developing active, collaborative, and exploratory learning strategies so that students can be more enthusiastic about learning. However, in reality, teachers are often still accustomed to using conventional learning methods such as lectures, discussions, and assignments without utilizing learning media or applying a particular approach (Malwah & Muh, 2023).

Interest in learning is one of the important things that need to be improved in students to be able to create good learning outcomes. If a student's interest in learning is high, then the tendency is that the learning outcomes obtained will also be high. The use of learning media can help make the learning process more interesting, effective and can increase students' interest in learning. Learning media is very important for building students' interest in learning. The function of learning media in general is to illustrate abstract or difficult to understand concepts so that they become clearer and more visible. The benefits of learning media can be felt by teachers and students involved in the learning process and can increase students' interest in learning (Zulfah, 2023).

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Teachers in the 21st century education era can utilize technology-based learning media to increase students' interest in learning. One of the factors that can affect the quality of learning and learning outcomes lies in the utilization of the teaching materials used (Djuwita, P. 2020). One form of learning media innovation that can attract students' attention is by using interactive learning videos and using evaluation media such as Wordwall. By using this interactive learning video, it will be able to motivate students' enthusiasm for learning and make it easier for students to understand the material being taught. This Wordwall evaluation media has the potential to create an interesting learning environment and create a fun learning environment for students.

Learning videos are one form of innovation and application of technology in education (Safitri et al, 2022). The benefits of using videos as a learning medium in the classroom are that it can make it easier for students to understand and remember the material. By combining images and sound in learning videos, students have an idea of the material being studied, in addition to learning

videos, the next innovative learning media is wordwall. Wordwall is an interactive game-based learning media that can be accessed online via <https://wordwall.net/myactivities>.

This application has an attractive and diverse appearance, and there are features, interesting templates designed in the form of questions for students to answer (Nadia et al, 2022). In this case, wordwall is an educational game based on words, it can be an interesting alternative to be used in learning at the elementary school level to adjust the characteristics of those who still like to play (Zulfah, 2023). The wordwall application has advantages such as the availability of game features that can be easily created and arranged according to needs so that they can be used for daily assessments in order to measure the level of student understanding of the teaching material delivered by the teacher on that day while teaching (Mayasari, 2022).

There have been many previous studies related to the use of wordwalls and learning videos as learning media. Research conducted by Bueno et al, (2022) the use of wordwalls as online learning media is very effective and can help teachers in realizing learning objectives and make it easier for teachers to create interactive learning. Brueno also argues that by using wordwalls, students feel satisfied learning using wordwalls, because on wordwalls students learn in the form of games so that learning feels more fun.

Bueno's opinion is in line with research conducted by Hasram et al, (2021) who argue that the wordwall platform is one of the platforms that can improve vocabulary in children. In addition to functioning as a learning medium, wordwalls can also improve vocabulary in children. This platform provides various features and game formats that can attract students' attention.

Research conducted by Fakhruddin et al, (2021) regarding the use of wordwalls, he argued that the use of wordwalls as a learning medium can increase student engagement. The presence of quizzes or questions on the wordwall makes students focus on the questions given, this shows that students are also focused on the learning process in class. Before implementing quizzes or questions using wordwalls, teachers need to introduce wordwalls to students at the beginning of learning. This aims to ensure that students know that after the learning process ends, a quiz will be held using a wordwall, so that students will be more focused on listening and understanding the material given by the teacher, so that enjoyable learning is created for students.

In addition to the wordwall application, researchers also found several previous research topics that discussed the implementation of learning videos. The first study conducted by Woodard et al, (2017) the use of learning videos can improve professional teaching practices of teachers. The use of learning videos is often used by teachers to share concrete teaching examples with students, and can be an innovative learning technique.

The second study conducted by Darmayanti et al, (2023) showed results that the use of interactive learning videos can increase student participation during the learning process, can increase student curiosity, and can hone students' thinking skills. Interactive videos prioritize a student-centered learning process, students must think, make decisions, and apply what they learn in everyday life.

Research conducted by Pattier (2021) is in line with several studies above if the use of videos in learning can create a more effective learning process. Pattier uses videos as a learning resource. The results show that if teachers implement videos in the learning process, it really helps students understand the material being taught so that the teaching and learning process runs effectively.

METHOD

The research method used is R&D (Research and Development) using the ADDIE model stages to produce products in the form of interactive learning video media and wordwall evaluation media on Pancasila education subjects, Pancasila material in elementary schools (Figure 1).

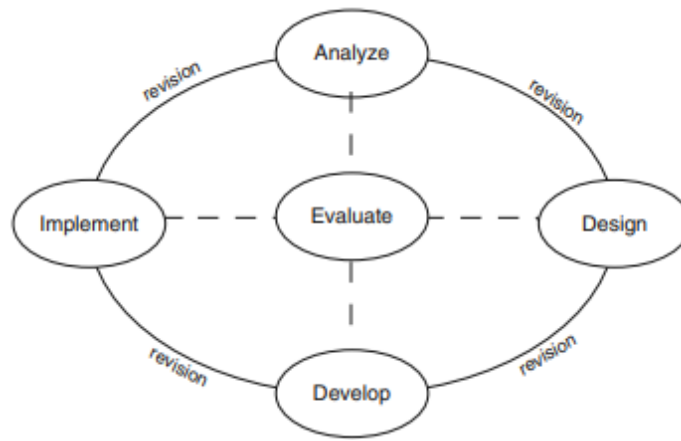


Figure 1. ADDIE Model

In the early stages of the study began with the analysis stage. At this analysis stage, observations and analysis of student needs are carried out according to the child's cognitive age and teachers can follow the developments of the times. The purpose of the analysis is used as the initial stage in this study is to determine the material and analyze or determine the media description that will be developed according to student needs (Tamini et al, 2023). Starting from curriculum analysis, analyzing what subjects can be integrated with the product to be developed, determining, selecting suitable materials is also carried out at this stage after conducting the analysis, the second stage is the design stage.

At this design stage, a design or design of the learning video media evaluation media wordwall that will be developed is made. The development stage is the stage of product validation through a questionnaire conducted by fellow students. The assessment of this questionnaire consists of 4 scales. The assessment of experts is carried out by fellow students, and a revision of the results of the suggestions and input given by the experts from filling out the questionnaire is carried out, then the next stage is implementation. At this stage, the researcher conducted a trial of the product that had been developed on several students.

At this implementation stage, the aim is to see the practicality, how much understanding the students have regarding the content or material presented in the form of learning videos and wordwall evaluation media. This implementation stage also aims to measure the impact of the product being developed. And the last is the evaluation stage. This evaluation stage continues to be carried out and occurs throughout the process of researchers developing the products to be produced (Anarli et al 2023).

The assessment instrument used in this study used questionnaire validation with a scale of 1-4. In addition to using a questionnaire, another assessment instrument used by researchers in this study was by interviewing students when they had finished implementing the developed product. In the validation questionnaire, there are three aspects asked, namely the material aspect, the media aspect, and the language aspect.

$$x^- = \frac{\text{Skor Perolehan}}{\text{Jumlah skor pernyataan}} \times 100\% \quad (1)$$

Table 1. Average score of Validation Results Assessment

Average Score (%)	Validity Category
81-100	Very good
61-80	Good
61 – 80	Enough
<40	Not enough

(Sugiyono, 2019)

RESULTS

1. Analysis Stage

The first stage in using the ADDIE model is analysis. The analysis stage can be called the needs stage. In the first stage, curriculum analysis is carried out. Curriculum analysis determines the independent curriculum that will be used, with learning resources using the independent curriculum teacher's book, and learning resources using the independent curriculum student's book. This analysis stage aims to see aspects of child development, because this curriculum is carried out in class II, students still need concrete media.

This stage is carried out at the beginning with the aim of observing, determining, analyzing what subjects can be integrated with the product to be developed, as well as determining, selecting. In addition to analyzing the material and subjects, this analysis stage also analyzes the characteristics and characteristics and needs of teachers and students for learning media. The needs of teachers in learning also need to be considered. The tendency of students who have difficulty understanding the subject matter taught by teachers using conventional approaches such as blackboards, LKS and textbooks. Students are better able to understand learning materials when teachers use learning media in the form of learning videos and evaluation media in the form of educational games. The purpose of this analysis stage is to design and obtain an initial picture of the learning media to be developed and adjust to the needs of students and teachers. This analysis stage includes:

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1. Identification of learning objectives: formulating objectives so that students understand and can apply Pancasila values in the family and school.
2. Curriculum analysis: this curriculum analysis is useful for matching media with the materials and curriculum used.
3. Needs analysis: determining the need for the use of learning video media and evaluation media in learning Pancasila education in elementary schools. Identifying the obstacles faced by students in understanding Pancasila education materials and the evaluation methods that have been used so far. Reviewing whether the use of digital media such as learning videos and wordwalls can help increase students' interest and understanding in learning Pancasila education in elementary schools.
4. Student Characteristics Analysis: Knowing the characteristics of students (e.g., age, interest in technology) so that the materials and media selected are appropriate.
5. Technology Needs: Assess students' readiness to use Wordwall as an evaluation medium, and the use of learning video media in the learning process. Wordwall is a digital-based interactive tool that allows students to conduct evaluations in the form of games.

6. Material Analysis: Identifying the content of the material to be delivered, such as understanding each principle and examples of its application in daily life in the family and school environment.

Through the identification of these problems, it is expected that more effective learning media can be developed to help students focus more, concentrate, and stay interested during the learning process. As an effort to overcome the problems that have been identified, researchers have developed interactive video-based learning media combined with the use of Wordwall as an innovative alternative, especially in the era of ever-evolving technology.

The selection of this media is based on several reasons, including because learning videos that present visuals and audio can help students better understand the material, improve concentration, and focus on the lesson. Meanwhile, Wordwall is used as an interactive quiz after the video is shown to increase student enthusiasm without neglecting the focus on the learning material. The use of these two media also takes advantage of technological advances, allowing online access, not limited to classroom learning.

2. Design Stage

In the second stage, namely the design stage, the alternatives that have been found previously begin to be processed. This stage focuses on planning the learning media that will be used, namely video-based media and Wordwall in the form of quizzes. The learning media design process begins with the creation of a learning video with the theme "Let's Get to Know Pancasila" for grade II students. This video is made by combining various interesting images and video clips that remain oriented to the material that has been determined, so that it can provide a clear picture to students about the material being studied. In addition, the video is equipped with audio, explanatory text, and background music (background) that is adjusted to the content, so that students can understand the material by listening and reading the explanation given.

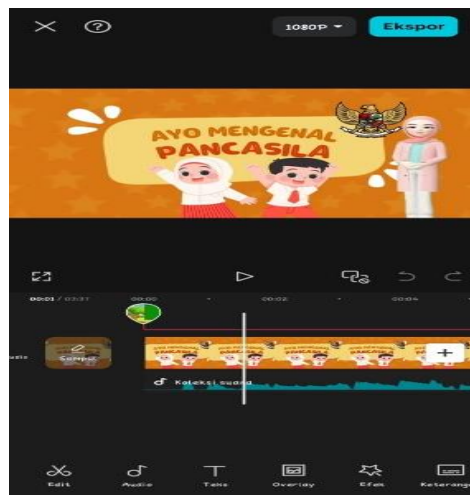


Figure 2. Learning video cover design

Next, Wordwall-based media is designed to be used as a quiz that will be presented to students after the teaching video is shown. This media is created by determining a relevant theme, then compiling questions, answer choices, and determining the correct answer according to the planned material.



Figure 3. Design wordwall when students choose questions



Figure 4. Evaluation media display wordwall while students work on questions

3. Stage Development

After the product is designed, the next stage is the development stage, at this stage a validation test is carried out by experts. The validation test uses a questionnaire filled out by fellow students. Validation assesses three aspects, namely material aspects, media aspects, and language aspects in the product. The validation results and suggestions submitted by other colleagues have been improved by the researcher. The learning media that was designed was developed by integrating the use of learning videos and Wordwall in the form of quizzes. These two components are designed to be interrelated, namely the material presented in the video is directly connected to the quiz given via Wordwall. The relationship between the two media aims to make it easier for students to understand the material in a focused and mutually supportive manner. This approach is also an alternative for teachers to combine two types of media in the learning process, so that both can function synergistically and strengthen the effectiveness of learning.

Table 2. Product Validation Results

NO	Rated aspect	Average Score	Category
1	Material Aspect	93%	Very good
2	Media Aspects	91%	Very good
3	Language Aspects	92%	Very good

From the validation results given by fellow students, researchers can conclude that the interactive learning video product and wordwall evaluation media are feasible for the implementation stage. The implementation stage is carried out with limited student trials. The trial was conducted on class II students.

4. Implementation Stage

After the development stage, the next step is the implementation stage, where the product that has been created is tested. The product is in the form of video-based learning media and Wordwall in the form of a quiz, which is applied to grade II students. Implementation was carried out with a sample of 6 grade II students. Implementation was carried out outside school hours, carried out at one of the student's homes. The use of this media was greeted enthusiastically by students, who showed a higher spirit in learning the material about Let's Get to Know Pancasila. This approach helps avoid boredom during the learning process, while increasing students' focus and concentration on the material presented. After implementing the product with students, the researcher asked several questions related to reflections on learning using videos and wordwalls.

Table 3. Limited Trial Student List

NO	INITIALS	CODE
1	N	Class II students
2	T	Class II students
3	D	Class II students
4	R	Class II students
5	D	Class II students
6	P	Class II students

Table 4. Questionnaire Table for students

NO	QUESTION	YES	NO	INFORMATION
1	Do you understand the material discussed in the learning video?	✓		Yes, it's good to learn using videos. So you understand the material better.
2	What did you learn after watching the learning video?	✓		Learn about Pancasila, Pancasila symbols and examples of Pancasila applications. And better understand learning using videos.
3	Is the learning video interesting?	✓		Yes, there are pictures, and animations.
4	Does this learning video help you understand the material?	✓		Yes, there are videos about Pancasila and playing quizzes makes it fun and easy to understand the material.
5	Does this learning video help you understand the material?	✓		Yes, there are videos about Pancasila and playing quizzes makes it fun and easy to understand the material.

6	Is this wordwall evaluation media easy to use?	✓		Yes it is easy to use.
7	Are the questions on this wordwall easy and relevant to the material?	✓		The problem is easy to understand
8	Does this wordwall media make learning more fun?	✓		Yes, it feels more fun because there are games.
9	Does this wordwall media motivate students to learn?	✓		Yes, there are games, so you can learn while playing.

From the results of submitting several questions above to students, researchers get the results of the implementation if the learning video product and wordwall evaluation media are popular with students, get active student participation in learning, can attract students' attention in learning, create fun learning for students, achieve predetermined learning objectives. Results According to Fathurrahman et al., (2019) The effectiveness of education can be said to be successful if the learning process achieves educational goals and achieves optimal student achievement.

5. Evaluation Stage

In the evaluation stage, an assessment of the learning media is carried out to measure the level of accuracy and effectiveness after being tested on students. This stage aims to determine the influence and results obtained from the use of video-based learning media and Wordwall in the form of quizzes. The evaluation results showed that both media succeeded in stimulating students' interest in learning, which was seen from their activeness, enthusiasm, and passion during the trial. In addition, students were also able to concentrate well on the material presented. The assessment was not only carried out through observation of student behavior during the trial, but also based on the results of the questionnaire which showed a positive response to the learning media used.

DISCUSSION

The development of interactive videos and evaluation media based on Wordwall in Pancasila subjects was declared feasible for use because it had met the aspects of media validity and practicality. Based on the results of the validity test, this aspect obtained a validation score of 91% which is included in the very good category, the material aspect obtained a score of 93% in the very good category, and the language aspect obtained a score of 92% in the very good category. This shows that Wordwall media and learning videos have met the very good criteria according to experts. This satisfaction is also reflected in the results of the questionnaire given to users after using the two learning media. Based on these findings, both media can be a solution for subject teachers to support the learning process. This media makes it easier for teachers to deliver material, while helping to control class conditions and increase student concentration on the material being taught (Aziz et al, 2024).

The use of learning media in the form of videos and wordwalls in the form of quizzes on the Let's Get to Know Pancasila material received a very good enthusiastic response from students

when tested. This learning media has a positive impact and makes the learning process easier, not only for teachers but also for students. This shows that this media is quite effective to implement because it provides benefits for both parties. In addition, media like this are very helpful in conveying material that tends to be difficult to understand, such as the Let's Get to Know Pancasila material, so that students can receive and understand the material more easily (Aziz et al, 2024).

In addition, learning media in the form of videos and wordwalls in the form of quizzes are designed in an attractive way to increase student interest. Videos are designed with various images and colors that can attract students' attention. Wordwalls offer a variety of interactive features such as quizzes, puzzles, and random cards that make learning more interesting and fun for students (Harni, 2024). The design is made in such a way that students are more interested, focused, and concentrated on the videos and quizzes displayed. Therefore, the use of attractive images and colors is chosen so that students pay full attention to the teacher and the learning materials presented.

The use of this media provides a new experience for students who previously only relied on books or pictures as learning support tools. When given material through videos and wordwalls in the form of quizzes, students become more enthusiastic in participating in learning and show more active interactions, both with peers and teachers. This interesting media is also able to meet students' needs in learning, according to their learning styles and how they understand the material. The positive response to the use of this media shows the importance of implementing learning media that are varied, interesting, relevant to students' needs, and in accordance with current developments. If examined more deeply, it is seen that learning media has a significant influence on student concentration.

CONCLUSION

The developed products in the form of learning videos and wordwall evaluation media are feasible to be implemented in the classroom. Through learning videos, students find it easier to understand the material. The use of wordwalls as evaluation media is also feasible to be implemented in classroom learning activities. The development of interactive learning videos and wordwall-based evaluation media on Pancasila education subjects in elementary schools has proven to be valid, practical, and effective to use. The validation results show that the material, media, and language aspects get an average score above 90%, with a very good category. The implementation of video and wordwall media can increase students' interest in learning, active student participation, and make it easier for students to understand the material being studied.

Student responses show that interactive videos and wordwalls make learning more interesting, more fun, can train students' focus, and make it easier for students to understand the material about Pancasila. The use of technology in learning provides a learning experience that is relevant to the development of the times and the needs of students. The use of videos and wordwalls in learning can increase students' motivation to learn and enthusiasm for school. From the results of the implementation and student questionnaires, we concluded that students would be more enthusiastic about learning if learning activities were packaged in the form of playing while learning.

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