

INTERACTIVE POWTOON MEDIA BASED ON CONSERVATION OF THE INTEGRITY NKRI CONTENT TO IMPROVE LEARNING OUTCOMES FOR FIFTH-GRADESELEMENTARY SCHOOL

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ABSTRACT

Innovative and interactive learning media can optimize Civics learning. Based on pre-research data at First Bandungan Public Elementary School, various problems arise, one of which is the need for more utilization of learning media, which makes the learning environment less enthusiastic and affects the low learning outcomes of students. This study aimed to develop the feasibility and effectiveness of Conservation-based Interactive Powtoon animated video learning media on Civics subject matter on maintaining the integrity of the Republic of Indonesia in fifth-grades First Bandungan Public Elementary School. This type of research uses the type of Research and Development (R&D) with the development model, namely Borg and Gall 8 stages. Data collection techniques in the form of tests and non-tests. The results showed that the media developed was worthy, as evidenced by several experts. Proven by the presentation of the presentation by the media expert of 88%, the grammar by the linguist of 91% and the content component by the content expert of 86%. Media that effectively increases student motivation and learning outcomes is shown by the t-test with a sig (2-tailed) value of 0.000 < 0.05, and the N-gain average increase test of 0.388 shows moderate criteria. Conservation-based interactive Powtoon animation video media can stimulate student learning to be more enthusiastic and motivated.

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1. INTRODUCTION

One of the efforts is educating the lives of citizens through education. Education can improve a person's mental, emotional, knowledge and skills for the life of himself, nation and state. Permendikbud Number 22 of 2016, one compulsory learning content is Civic Education with integrated thematic learning. (Permendikbud, 2022).

Civic Education is expected to give birth to a good, intelligent and reliable personality of the younger generation in a global society to improve the quality and quality of citizens who contain character education to form character values by Pancasila (Dewi & Handayani, 2021; Sutrisno, 2018). One of the essential roles and functions of civic education is to spread the values of the Pancasila ideology, which is the basis for the concept of citizenship, as stated in the objectives of civic education (Asyafiq, 2018; Sutrisno, 2018).

In the learning process, selecting teaching methods and media is essential because these two are related to achieving learning goals (Akbar et al., 2022; Anggita, 2021). Learning media is a tool or way to

distribute and convey content that stimulates the mind to facilitate the learning process and achieve learning goals (Zahwa & Syafi'i, 2022). Meanwhile, according to (Mayah, 2021; Puspita et al., 2022; Rimayasi et al., 2022), in this era of globalization, the subject of civic education has been degraded in the eyes of students due to the lack of maximum Civics teaching process, which has tended to be carried out only with conventional approaches and non-contextual learning where learning is only based on the lecture or question and answer method. It can be concluded that the lack of utilization of engaging learning media causes many students to be less motivated in Civics courses, so learning objectives have not been achieved, and learning outcomes are low.

Based on the results of observations, the problem of learning Civics content also occurs at First Bandungan Public Elementary School. Obtained to the results of interviews with fifth-grade teachers in the learning process of Civics learning, the problems that occur are that students have difficulty understanding content about Indonesian historical events, learning objectives have not been fully achieved due to the less than optimal use of media in the form of pictures, in Civics subjects many theories must be stimulated by learning media to students to arouse curiosity and motivate students so that they can understand the content. These problems cause Civics learning outcomes in fifth-grade students to obtain insufficient results to meet the KKM. Below is a pie chart of student learning outcomes in Civics fifth-gradesFirst Bandungan Public Elementary School for the 2021/2022 academic year.

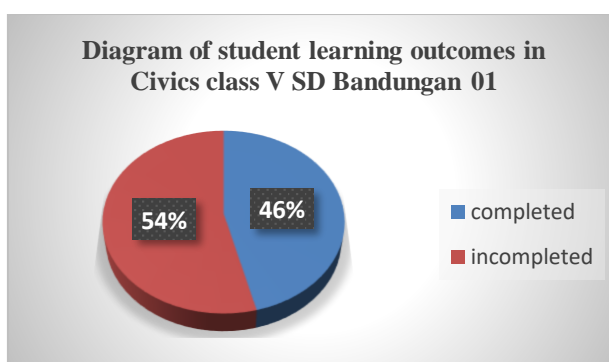


Figure 1. Circle Diagram of Civics Learning Outcomes of Fifth-gradesStudents of First Bandungan Public Elementary School

The diagram shows that the basic competency (KD) 3.4 Exploring the benefits of unity and integrity to build harmony in the content of Civics lessons, most students, namely 20 out of 37 students, have reached the standard of minimum completeness of mastery learning. This means that out of 37 students, only 20 (54%) have yet to reach the minimum completeness of mastery learning, and those who have reached the KKM are 17 students (46%).

These problems can be overcome with the development of innovative and interactive media. The solution to increasing the understanding and learning outcomes of Civics in fifth-gradesFirst Bandungan Public Elementary School is to develop interactive Powtoon animated video learning media because of the innovative and attractive appearance of learning media. Learning media is presented in writing and accompanied by animated images and videos to facilitate students' understanding of learning (Deliviana, 2017). This interactive learning media is also based on conservation to improve students' understanding of fair and honest attitudes toward the content of the Integrity of the Unitary State of the Republic of Indonesia.

Learning media is a communication tool teachers use in teaching and learning activities and functions as a messenger from learning sources to message recipients, namely students (Fitriyani, 2019; Yudiyanto et al., 2022). The purpose of the animated learning video is to make learning more fun for elementary school students and make students better understand what they are learning (Deliviana, 2017; Ponza et al., 2018). Visual media is a tool used in teaching and learning through the senses of hearing and vision to enable learners to acquire knowledge, skills or attitudes (Fauziah et al., 2021).

One of the technology-based media that can be used is Powtoon; this media is interactive, communicative and fun in audio-visual media because this technology has funny animated images and more colourful transition effects (Anjarsari et al., 2020; Fauziah et al., 2021). According to (Deliviana, 2017 Peri, 2021), Powtoon is a web-based application program available on the internet and functions as an application for making animated videos for presentations and learning media. The learning media is easy to create and use, resulting in an engaging animated video to attract students' interest during learning.

All things related to character development in the community based on conservation values at Semarang State University are essential to form a community that implements conservation values that will

become agents of instilling conservation values in society, nation and state (Masrukhi et al., 2022). Conservation includes values that are responsibility, care, love, compassion, wisdom, and politeness. When realized daily, it will implement the values that grow and develop into the breath of spirituality (Masrukhi, 2012; Masrukhi et al., 2022). Conservation is related to activities that are nature management and cultural preservation, human relations with humans, humans with the surrounding nature, and the application of values in various aspects of life (Masrukhi et al., 2022).

This research is relevant to research that examines the utilization of Powtoon animated video learning media; it is proven that Powtoon animated video learning media is worthy to use, responds well, and improves student learning outcomes (Safitri & Titin, 2021). Powtoon animation videos also improve students' learning outcomes, which is quite significant (Mulyana et al., 2023). Powtoon media is one of the innovations in learning because it is more interactive and versatile, with different animations to encourage student motivation in receiving content delivered or given by the teacher (Anggita, 2021; Hendrina et al., 2022). Other research that supports this development with technology-based learning media in Civics learning can achieve learning objectives (Nurdiansyah et al., 2018). In addition, the development of conservation-based Powtoon animation videos as learning media that have been developed can be worthy of use and meet valid and practical criteria for strengthening students' character education values (Puspita et al., 2022).

Based on the research that has been done, the researcher will develop testing the feasibility and effectiveness of conservation-based interactive Powtoon animated video learning media to improve the Civics learning outcomes of fifth-grade students of First Bandungan Public Elementary School on the content of maintaining the integrity of the Republic of Indonesia. This media was developed based on UNNES conservation, which consists of eight pillars (humanist, inspirational, caring, innovative, creative, sportive, fair and honest) so that the media is more innovative and by the times in the era of globalization, which requires the involvement of technology. This media is more meaningful for students because it is packaged in interactive animated videos and easy access to learning. This animated video also involves inspirational stories in strengthening the character of fairness and honesty, one of the characteristics of the eight pillars of UNNES conservation values.

2. METHOD

Republic of Indonesia based on conservation in the learning content of Civics on the content of unity and integrity in Indonesia fifth-grades was carried out at First Bandungan Public Elementary School with the type of Research and Development. According to (Sugiyono, 2018), Research and development (R&D) is a method used to develop and validate the products used in education and learning. This study aimed to determine the development of learning media, testing the feasibility and effectiveness of conservation-based interactive Powtoon animation videos on the content of Civics lessons on maintaining the integrity of the Republic of Indonesia. Researchers used a model adapted by Borg and Gall. The steps in the Borg and Gall development model (Sugiyono, 2018) have ten steps, namely: (1) Potential and problems; (2) Data collection; (3) Product design; (4) Design validation; (5) Design revision; (6) Product trial; (7) Product revision; (8) Usage trial; (9) Product revision; (10) Mass product manufacturing. Concerning research on animated videos to maintain the integrity of the Unitary State of the Republic of Indonesia based on conservation, researchers only reached the 8th step of the Borg and Gall development model to test the effectiveness and feasibility of the media due to limited time and costs to carry out mass production.

This research was conducted at SD Negeri Bandungan 01, Jl. Diponegoro KM 1, Bandungan Village, Bandungan Sub-district, Semarang Regency. The questions were tested in the fifth grade of First Bandungan Public Elementary School with 25 students. The small-scale trial was conducted with nine students, and the extensive group test was conducted with 25 students in fifth-grades of First Bandungan Public Elementary School in the 2021/2022 school year, so the total population was 59.

The data collection technique in this study used students' pre-test and post-test results using a pre-experimental design model one group pre-test and post-test design. In the pre-test process before and after being treated, non-test techniques consist of interviews, observations, documentation and questionnaires. The questionnaire consists of a media feasibility questionnaire given to media and content validators, a needs questionnaire and a response questionnaire given to teachers and fifth-grade students.

The analysis data techniques in this research are quantitative descriptive analysis and qualitative descriptive analysis. Initial data product analysis in the form of an analysis of the feasibility of media, language and content by experts as well as an analysis of the responses of students and teachers after using the media in the learning process, then qualitative descriptive analysis of initial data in the form of observations, interviews, needs questionnaires used to determine the design of media development and normality tests used to determine the normality of the distribution of data, then quantitative analysis of the final data in the form of t-tests and n-gain tests used to test the effectiveness of Interactive Powtoon animated video learning media to maintain the

integrity of the Republic of Indonesia based on conservation in Civics learning based on the results of pre-test and post-test of fifth-grade students of First Bandungan Public Elementary School.

3. RESULT & DISCUSSION

The discussion revisits the development of Powtoon animation media which includes 8 stages of Borgand Gall, namely: (1) Potential and problems; (2) Data collection; (3) Product design; (4) Design validation; (5) Design revision; (6) Product trial; (7) Product revision; (8) Usage trial.

3.1. Potential Problems

The potential problem found in the fifth grade of First Bandungan Public Elementary School is the low learning outcomes of Civics on theme 5 "ecosystems" content on maintaining unity and integrity in Indonesia from 37 students, only 17 students (53%) did not reach the the standard of minimum completeness of mastery learning and those who reached the the standard of minimum completeness of mastery learning were 20 students (42%). Based on the results of interviews with teachers, students are less interested in Civics content because teachers have not developed learning strategies and models that only use the lecture method to explain the theory studied, the lack of optimal use of learning media to stimulate students so that the lack of curiosity and motivation to learn students in the learning process. In addition, in online Civics learning, learning objectives have not been fully achieved due to constraints on children's facilities that support online learning. In online Civics learning, the media used in fifth-gradesof First Bandungan Public Elementary School are only pictures and animated videos given to students through *WhatsApp Group*.

3.2. Data Collections

Researchers have conducted a descriptive analysis to be considered in the development of learning media products through a questionnaire of the needs of teachers and students on animated videos to maintain the integrity of the unitary state of the Republic of Indonesia based on conservation on Civics learning content on maintaining unity and integrity in Indonesia.

Based on the results of the teacher needs questionnaire, the conservation-based interactive Powtoon animated learning media can be used as learning media. According to the teacher, the animated video Keeping the Unity of the Republic of Indonesia based on Conservation Values can increase students' motivation and interest in learning. An attractive display with varied background colors accompanied by images and sounds that match the content.

Based on the results of the student the needs questionnaire, it can be seen that many students have difficulty learning Civics content on maintaining unity and integrity in Indonesia. Students need learning media that is attractive and attractively packaged using images with bright colors as a Civics learning media about maintaining unity and integrity in Indonesia so that student interest in learning increases.

3.3. Product Design

Interactive *Powtoon* animation video to maintain the integrity of the Republic of Indonesia based on conservation is an audiovisual technology learning media with .mp4 format that can be accessed online with the internet network, this media can also be accessed offline with devices, PCs, laptops, and other video players/viewers. The use of this animated video in learning by displaying it through an LCD Projector. In addition, animated videos to maintain the integrity of the unitary state of the Republic of Indonesia can be accessed by students independently anywhere and anytime through their respective devices by clicking on the link.

a.) Front Page Section



Figure 2. Front Page Section View

b.) Display of Contents to Protect NKRI



Figure 3. Display Content Maintain the Integrity of the Unitary State of the Republic of Indonesia

c.) Display of Introduction to Conservation Insights



Figure 4. Konservasi Display of Introduction to Conservation Insights

d.) Display of Examples of Honest and Fair Character Behavior in Daily Life



Figure 5. Display Example of Conservation Character Behavior (Honest and Fair) in Daily Life

e.) Reflection Display on the Content to Maintain the Integrity of the Unitary State of the Republic of Indonesia



Figure 6. Reflection Display on the contents to Maintain the Integrity of the Unitary State of the Republic of Indonesia

3.4. Design Validation

The conservation-based *Powtoon* animation video media design was assessed for media feasibility by three content experts including media experts, linguists and content experts. Validation of the assessment using a questionnaire given by media experts, language structure by linguists and content components by content experts. The assessment given by the researcher uses a Likert-shaped questionnaire, the validator provides an assessment by checking the column provided and providing suggestions for improving conservation-based interactive *Powtoon* animated video learning media.

Media experts who test have a doctorate in the field of media and educational technology, then experts who test the language structure have a doctorate in their field and experts who test the content component have a master's degree in their field, the media is declared worthy by media experts, linguists and content experts. The media expert stated that the media was very worthy through the assessment of the indicators presented in the table.

Table 1. Recapitulation of Media Expert Assessment

Component Indikator	Score	Percentage
presentation aspect	11	92%

aspects of child development level	18	90%
aspects of use	14	88%
design aspects	17	85%
Total score	60	
Maximum score	68	
Percentage	88%	
Criteria	very worthy	

Then the linguist stated that the media was very worthy through the assessment of the indicators presented in the table.

Table 2. Recapitulation of Language Expert Assessment

Component Indicator	Score	Percentage
aspects of language structure	16	81%
aspects of sentence usage	14	88%
aspects of language according to child development	10	83%
aspects of sentence effectiveness	15	93%
Total score	55	
Maximum score	60	
Percentage	91%	
Criteria	very worthy	

Then the content expert stated that the media was very worthy through the assessment of the indicators presented in the table.

Table 3. Recapitulation of Content Expert Assessment

Component Indicator	Score	Percentage
presentation aspect	12	75%
content aspect	10	83%
content suitability aspect	9	75%
aspect of the suitability of the picture with the content	19	79%
Total score	50	
Maximum score	58	
Percentage	86%	
Criteria	very worthy	

Based on the description above, the results of the validation assessment on each component of the interactive *Powtoon* animated video to maintain the integrity of the Republic of Indonesia based on conservation by linguists, media and material experts can be concluded that the animated video to maintain the integrity of the unitary state of the Republic of Indonesia based on conservation is very worthy to use in learning activities. Assessment of the feasibility of presentation by media experts gets a percentage of 88% with very worthy criteria, grammatical assessment by linguists gets a percentage of 91% with very worthy criteria and content assessment by material experts gets a percentage of 86% with very worthy criteria. Overall, the validation assessment carried out by experts obtained a score with a very good category so the *Powtoon*-based animated video learning media was worthy to use (Dewi & Handayani, 2021). In addition, other findings state that the high percentage validation assessment of *Powtoon* media is categorized as "very worthy" for use (Raihanati et al., 2020). The feasibility of media in relevant research is proven that the development of *Powtoon*-based audiovisual learning media can improve students' creative thinking skills (Zulfa et al., 2023).

3.5. Design Revision

After the media was tested for feasibility, the researchers improved the media according to the suggestions by the experts. The following table 4 recapitulates suggestions for improvement by media, language and content experts.

Table 4. Suggestions for Improvement by Experts

Experts	Revision Suggestion
media	Turn up the volume
language	Avoid repetitive use of words and pay attention to spelling
content	Improve the lesson plan according to thematic characteristics and the substance of the material in the <i>Powtoon</i> video is adjusted to the indicators

Content experts provide advice to correlate indicators with thematic characteristics according to the substance of the material used so that students know the learning objectives.

3.6. Product Trial

The product trial was conducted in fifth-grades of First Bandungan Public Elementary School using a sample of 9 students out of 25 students. The research implementation used a purposive sampling technique, which is a sampling technique with certain considerations. Product trials began by carrying out demonstrations and analyzing the results of the questionnaire responses to the interactive Powtoon animated video to maintain the integrity of the Republic of Indonesia based on conservation by students and teachers.

Based on the teacher's response questionnaire to the animated video to maintain the integrity of the unitary state of the Republic of Indonesia based on conservation with the aspects asked or assessed a total of 12 aspects in the form of a Likert scale, getting a response/score with a total score of 53 and getting a percentage value of 88% with very good criteria. The student response questionnaire consists of 10 indicators given to 9 students with the results of the analysis of the student response questionnaire in the product trial of the interactive Powtoon animated video to maintain the integrity of the Republic of Indonesia based on the conservation of a number of 10 aspects in the form of a Likert scale, getting responses/scores with a total score of 416 and getting a percentage value of 92% with very good criteria.

3.7. Product Revision

At this stage, researchers have made improvements to volume adjustments, material adjustments to thematic characteristics and language organization.

3.8. Usage Test

The pilot test was conducted in fifth-grades of First Bandungan Public Elementary School using a one-group pretest-posttest design. To determine the effectiveness of the media, researchers compared the pretest and posttest learning outcomes obtained from the results of the usage trial. Based on the results of the teacher's response questionnaire and students' responses, it can be concluded that the interactive *Powtoon* animation video to maintain the integrity of the conservation-based NKRI is suitable for learning Civics content on unity and integrity in Indonesia.

Before they started learning Civics content on unity and integrity in Indonesia using interactive *Powtoon* animated videos to maintain the integrity of the Republic of Indonesia based on conservation, researchers got pretest scores by distributing questionnaires with the results of the average score obtained 64.4. While the post-test value can be obtained after students have taken part in learning Civics material on unity and integrity in Indonesia with interactive *Powtoon* animated videos to maintain the integrity of the Republic of Indonesia based on conservation with the results - the average post-test value obtained is 78.2. The complete value obtained during the pretest was 10 students (40%) and the number of students who completed the posttest was 21 students (84%),

Table 5. Average Difference

Action	Average	Average Difference
Pretest	64,4	13,8
Posttest	78,2	

After getting the students' cognitive learning outcomes in the table, the researchers analyzed the final data of the media with the *T-test* and *N-Gain* test to determine the effectiveness of the media. To perform the normality test, researchers used the *Shapiro-Wilk* test formula because the sample amounted to 25 samples, said to be a random data distribution of a small sample with a data sample size of less than 50 samples ($N < 50$) assisted by SPSS ver25. The following are the results of the pretest and posttest normality test of student learning outcomes.

Table 6 Average Difference

Action	Value sig.	Description
Pretest	0.128	Normally Distributed
Posttest	0,609	Normally Distributed

The results of the normality test of the pre-test and post-test scores with the *Shapiro-Wilk* test assisted by the SPSS ver25 application show that the results of the normality test sig. value on the pre-test is 0.128 and on the post-test is 0.609, so the data on the pre-test and post-test are normally distributed of sig. $> 0,05$. Continued using parametric statistics with the paired t-test test formula in the SPSS ver25 application program after using the interactive *Powtoon* animated video to maintain the integrity of the Republic of Indonesia based on conservation. The criteria in the t-test are:

$$t \text{ value} > t \text{ tabel, } H_a \text{ accepted}$$

t value < t tabel, H_0 accepted

- H_0 : The development of interactive *Powtoon* animation videos to maintain the integrity of the Republic of Indonesia based on conservation is not effective in Civics learning on the learning outcomes of fifth-grade students of First Bandung Public Elementary School.
- H_a : The development of interactive *Powtoon* animation videos to maintain the integrity of the Republic of Indonesia based on conservation is effective in Civics learning on the learning outcomes of fifth grade students of First Bandung Public Elementary School.

In the calculation of the results of the pretest and posttest average difference test results show that the t-test sig value. (2-tailed) of $0.000 < 0.05$ so it can be concluded that there is a significant difference between the results of the pretest and posttest data. Based on the results of this study, the interactive *Powtoon* animated video media to maintain the integrity of the conservation-based Republic of Indonesia is relevant to research conducted by (Akbar et al., 2022; Jannah, 2019) that *Powtoon* is effectively used in classroom learning. Other relevant research by (Rimayasi et al., 2022; Suyanti et al., 2021) *Powtoon* can increase students' learning motivation during learning. *Powtoon* media can also improve student learning outcomes in Civics subjects (Khoirunnisa & Robiansyah, 2022; Tuti & Ninawati, 2022).

N-Gain test, the average increase in students' learning outcomes on the material of unity and integrity in Indonesia after the interactive *Powtoon* animated video media to maintain the integrity of the Republic of Indonesia based on conservation is known to have increased by 0.388 with an average difference between the pre-test and post-test of 13.8 and is included in the medium criteria. This research is in line with research conducted by (Choirudin et al., 2020; Jasadi et al., 2021) because there is a significant difference and it is practical to use during learning. *Powtoon* can help achieve learning objectives effectively applied in learning and significantly increases students' attention and enthusiasm for learning (Lestari & Suryani, 2019; Nugraheni & Fathoni, 2022). The *Powtoon* media has successfully met the criteria, and benefits, and has a high potential to solve problems for learning both directly and solutions for distance learning using audiovisual learning media based on information and communication technology (Donna dkk., 2021; Fatmawati, 2021).

4. CONCLUSION

Based on the results of research on the development of interactive *Powtoon* animation video media to maintain the integrity of the Republic of Indonesia based on conservation in Civics learning content material on unity and unity in Indonesia for fifth-grade First Bandung Public Elementary School, it can be concluded that researchers have used learning media through eight stages, namely: (1) potential and problems; (2) data collection; (3) product design; (4) design validation; (5) design revision; (6) product testing; (7) product revision; and (8) trial use. The interactive *Powtoon* animated video media for preserving the integrity of the Republic of Indonesia based on conservation has been developed based on feasibility assessments by media experts, language experts and material experts with very feasible criteria in the presentation feasibility component with a percentage of 88%, the linguistic component 91% and the content feasibility component with a percentage of 86%. Interactive *Powtoon* animation video media maintains the integrity of the Republic of Indonesia based on conservation and is effectively used in Civics learning on unity and unity material in Indonesia. This is shown based on the students' learning results; there is a significant difference between the pretest and posttest data, with an average difference of 13.8, and the average increase test calculation (N-Gain) is 0.388 with medium criteria.

By the development research that researchers have carried out, the suggestion that can be conveyed is that *Powtoon* animation learning media can be applied as one of the many learning media that have been developed. Apart from aiming to improve student learning outcomes, the introduction of *Powtoon* animation can also be used as an alternative to increase student learning motivation and knowledge. *Powtoon*'s animation media is still limited to the material on maintaining the unity and integrity of Civics content, so it is hoped that it can be developed more widely into other subject matter and content.

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