

THE DEVELOPMENT OF INTERACTIVE MEDIA WITH ARTICULATE STORYLINE WITH MOBILE LEARNING BASED ON CIVIC EDUCATION FOR CLASS V STUDENTS

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ABSTRACT

This study aims to develop interactive learning media made with Articulate Storyline with Mobile Learning based on the content of Civics Education in the matter of rights, obligations, and responsibilities in society. This research targets the fifth-grade students of 04 Karet Elementary School. The method used in this R&D research is the ADDIE model using the Likert scale evaluation technique. Data analysis was carried out by interviews and questionnaires for teachers and students. In Development, media validation obtained a value of 95% with a very good category. Material validation obtained a value of 91% in the very good category. Language validation obtained a value of 97% with a very good category. The assessment was also carried out by 5 students in the one-to-one trial getting a score of 97% in the very good category, the assessment of 10 students in the small group trial getting a score of 94% in the very good category, and the assessment of 20 students in the trial field test got a score of 97% with very good category. The results of this research on the Development of interactive media products with mobile learning based on the content of Civics Education for Grade V Elementary School can be declared valid and very suitable for online distance learning or use in face-to-face learning activities at school. Furthermore, this learning media can be expanded by using other Civics material.

Keywords: learning media; articulate storylines; PPKN; Development; mobile learning

INTRODUCTION

Education is one of the efforts to achieve goals in life. Humans in their lives always learn from birth to old age. Education itself is a provision to go to a future that is aspired to and has benefits for ourselves and others. According to Langeveld, Pendidikan is an effort to influence, protect and give the purpose help to maturity students or in other words, help students educated to be able to carry out their life duties joint without the help of lain people (Suriansyah, 2011: 1). Langeveld explained that education is a process of maturity to be able to live independently without being helped by people around. Education can be interpreted as a process of efforts to change students' behaviour into adult human beings who can live with society and perform their duties as citizens and as human beings. To achieve the functions and objectives of national education, one of the instruments that help is the existence of Pancasila and Citizenship Education subjects in elementary schools.

Pancasila and Citizenship Education aims to increase the love for the motherland and understand its status as a citizen who gets rights, carries out obligations, and performs

responsibilities. As recipients of the nation's successor,, elementary school students need to be prepared from a small age to grow their love for the motherland and understand their role and responsibility as citizens of society as aspired by Pancasila and the 1945 Constitution. Not only at home and in the environment, but schools also have a big role to build students' sensitivity to carry out their obligations and get the rights and responsibilities of students as citizens and society. Education in schools not only focuses on the Development of intellectuality but also on coaching to build the characteristics of students. With this, teachers play an important role in preparing students in elementary schools to be educated from a young age to foster a sense of care and discipline for the environment and their country. AIt is a great challenge for teachers to guide and be role models to their learners in school.

Learning Civic Education in elementary schools helps the younger generation to regenerate a sense of responsibility to perform their obligations as citizens and society. Wahab stated that Pancasila and Citizenship Education in elementary schools is an educational program based on Pancasila values as a vehicle to develop and relax noble and moral values rooted in the culture of the Indonesian nation, which is expected to become an identity that is manifested in the form of behaviour in the daily life of all Indonesian citizens" (Ananda, 2019: 2). Wahab believes that the subjects of Pancasila and Citizenship Education can shape students following the ideals stated in the 1945 Constitution and Pancasila. The teacher also sees success in learning as a facilitator who needs to develop creative and effective teaching methods for students so that learning objectives are achieved. In carrying out learning activities, one of the important components of helping the learning process to be successful is the learning media. Learning media is everything that can help and arouse the motivation of learners to understand what is being learned. Usually, learning media is prepared and provided by the teacher. Learning media is also a determinant of the success of the teaching and learning process. Therefore, learning media becomes varied, encouraging many teachers to create learning media that are different from usual. Learning media can help make learning more meaningful and easy for students to understand.

Unfortunately, many learning media are still not creative and innovative. In this industrial revolution 4.0, teachers are expected to start utilizing advanced technology in learning media to be appropriate and keep up with the times. There are still many learning media used in the form of books. Of course, if this is done continuously for a long time, it will be left behind by the times, and their understanding of students will be slower.

Multimedia learning with *the mobile learning* method can be one of the methods that depend on technology and can be used to support learning in the industrial revolution 4.0 in this era. *Mobile learning* is one of the learning methods that utilize technological advances. Some of the technologies that can be used in *mobile learning* methods are mobile phones, laptops, tablets, PCs, and devices connected to the internet. The *mobile learning* method can make it easier for teachers and students because with the use of *mobile learning*, students can access learning content anytime and anywhere and can be taken anywhere as long as an internet connection is connected.

The COVID-19 pandemic, which attacks human breathing and can result in death, occurred in November 2019 until now in Indonesia. WHO, the world health organization, has stated that this pandemic is dangerous and is happening in all corners of the world. Therefore, the Indonesian government immediately issued a health protocol by suppressing the space for the Indonesian people to move so that this disease does not become infected and spread to each other. The Ministry of Education and Culture issued a new policy to protect the nation's children and the Indonesian people that all schools in Indonesia are held *online* and carried out in their respective homes. Learning using *mobile learning* media will be very appropriate during distance learning.

In the needs analysis conducted by researchers at SDN 04 Karet with observations, it was found that the media used in PPKn learning was limited, only relying on PPT-containing text. The use of PPT for learning media was not following distance learning due to the absence of learning adjustments online, making it easier for students to understand learning. When interviewing grade 5 teachers, the online learning media used and relied on was only PPT, especially the content of the PPKn lesson on Rights, Obligations, and Responsibilities as Citizens of the Community. KDP learning in elementary schools is closely related to the environment. Therefore, students must desire to learn actively and independently, seeing some examples in their environment. If only PPT, the material presented will not be effective and absorbed properly.

Furthermore, the author interviewed students in class V at SD Negeri Karet 04 Pagi and complained that students felt saturated with learning media that was not interesting because it was only in the form of PPT, which contained only writing. Especially during the COVID-19 pandemic, learning is only carried out *online*, so students expect the learning media to make it easier for students to use, not boring and easily learned at home. Students also want to participate in learning actively, so the learning media needed is also expected to be participatory.

The industrial revolution of the 21st century should have started using advanced technology that can facilitate learning and attract students' attention. One of the interesting technologies that we can take advantage of in the world of education is the technology that combines image, video, audio and animation media with learning materials or multimedia learning.

According to Kuswanto & Walusfa, multimedia learning can be developed based on the assumption that the communication process in learning will be more meaningful because this learning multimedia is a combination of various media elements consisting of text, graphics, photos, animations, videos and sounds that are presented interactively in learning media (Jamiludin, 2019: 9) . Kuswanto & Walusfa explained that multimedia learning is one of the interesting communications and can make learning meaningful.

One of the *software* that can develop interactive multimedia is *Articulate Storyline*. This *software* helps facilitate learning media development, one of which is in Civic Education. *Articulate Storyline* is very interesting to use as an interactive multimedia creation *software* because it supports animations with almost the same interface as *PowerPoint*, making it very easy to create learning media to follow educational progress in the 21st century. This media is needed because it is trusted by researchers to solve the problem of complaints that occur following the analysis of problems obtained at SD Negeri Karet 04 Pagi. *Articulate Storyline* has many features that can help students easily understand and make learning more enjoyable.

Researchers found the results of a relevant study on *Articulate Storyline* written by Annisa Wijayanti entitled "Development of Interactive Multimedia Based on Articulate Storyline in Class V Thematic Material Theme 3 Subtheme 3 Learning 6 Elementary School". The research conducted by Annisa Wijayanti is one of the motivations for researchers to develop Civic Education learning media with the *Articulate Storyline* innovation.

The difference between this research and the previous research is that in this study, the researcher developed an interactive learning media based on *mobile learning*. *Mobile learning* is *portable* in that learning media can be used anytime and taken anywhere, so there are no limitations for students as users to learn anytime and anywhere. The *mobile learning* method greatly saves time and effort because of its practical use and makes flexibility easier for students and teachers.

With this, researchers want to create learning media that utilizes technology from *Articulate Storyline* with *mobile learning* methods. Researchers will design *articulate storylines* according to the characteristics of class v students, which will be a differentiator of

Articulate Storyline learning media with *mobile learning* methods with others is that there are game features that can make children not only focus on serious material but also make the material fun to build students' willingness to learn. Learning media with *Articulate Storyline software* is highly expected to become an alternative to learning, increase the variety of learning media, and make it easier for teachers and students in the online learning system. In this case, the researcher felt that the interactive multimedia *Articulate Storyline* was very interesting to develop and use as a learning medium for students in elementary school.

RESEARCH METHODS

The type of method used in this research is the research and development method (*Research and Development*). According to Sugiyono, research and development methods are research methods used to produce certain products and test their effectiveness of these products (Sugiyono, 2015: 47). Sugiyono believes that the research and development method is a method to make products and test products until they become the best products than before. This research and Development is usually interpreted as refining an existing product to be made better than before. According to Putra, Research and Development is a research method that is deliberate, systematic, aimed or directed to find, formulate, improve, develop, produce, and test the effectiveness of products (Nusa, 2015: 67). It can be concluded that *research and Development* is a way to develop existing products or new products that will be made into new products and can facilitate the running of learning.

Research Model

One of the *research and development* models is the ADDIE model. ADDIE is an *Analysis, Design, Develop, Implement, Evaluate*. Following the acronym of ADDIE, the stages of development procedures used by this model are (1) Analysis, (2) Design, (3) Development, (4) Implementation (5) Evaluation. Branch RM stated that this research model is a concept to develop an effective product and can be used to develop products in the field of education and other learning resources (Branch, 2009: 1). Branch RM interprets that this research model is the process of making a new product until it becomes an effective product according to the purpose for which the product is made, the product can be used as a learning resource for students.

In ADDIE research, several stages must be done to obtain good and effective results, (1) the first t chap is *Analyze* or analysis. The analysis is carried out to analyze the problems and needs needed to overcome problems in the field. Researchers conducted a needs analysis with interviews with teachers and students of class v. Later, the analysis obtained from the interview will determine what kind of research will be made and how.

(2) the second t chap is *Design* or Design. In this stage, researchers have begun to design learning media following the results of the needs analysis carried out in the first stage. The Design is carried out following the analysis and characteristics of students in grade v elementary school so that the learning media is effective and produces changes. The product design in this study will produce a *flowchart*, *storyboard*, and instrument for the framework of multimedia learning products. *Flowchart* means the flow of multimedia learning that will be made by the researcher concisely according to the information obtained from the first stage, and a *storyboard* is a board or story chart in the form of a rough image according to the flow idea in the *flowchart*. Later *storyboards* and *storyboards* will help and facilitate the creation of multimedia learning, while instruments are a tool for respondents to assess the validity of the learning media created.

(3) the third t chap is *Development* or Development. At this stage, the researcher has begun to realize the framework of the product that has already been made in the second stage. Multimedia learning is created, and the final result will be tested for validity by experts such as linguists, media experts, and material experts. In conducting the trial, experts will assess multimedia learning with assessment instruments that have been compiled in the second stage and provide a review of the shortcomings in multimedia learning, researchers will revise according to the reviews that experts have given to match the good and correct learning media. After conducting the validity test, the next stage is still in *development*, and a trial is carried out for students in grade v elementary school. The trial will be carried out in two ways: *one-to-one method, small group, and field test*. From this trial, respondents are expected to provide suggestions and comments to see the validity of *articulate Storyline* learning multimedia to make changes for the better

(4) the fourth t chap is *implementation*. After multimedia learning has received validity from experts and trials with students, then a class is prepared that is ready to learn because learning will be carried out using new products that are developed and tested for validity by researchers in the implementation stage in this study was not carried out because this research was only to test the feasibility of learning media.

(5) the fifth t chap is *evaluating* or evaluating. In this stage, researchers will look at the evaluation given by experts and respondents to make final revisions to create a perfect *Articulate Storyline* learning multimedia. This research does not reach the evaluation stage because this study aims only to test the feasibility of learning media.

Respondents

This research involved several respondents: material experts, linguists, media experts, homeroom teachers v and students or children in grade v elementary school. Especially for students, researchers use 3 kinds of trials: *one-to-one, small group, and field test*. The first thing that was done before the study was to analyze the problem by making observations at the school of SDN 04 Karet and collecting information by interviewing the teacher of class v and students who were in class v. Furthermore if the learning media is ready to be used, trials to experts and new students are carried out to see whether the learning media can be used or not.

Data Collection Techniques

There are several data collection techniques, the following are the data collection techniques used by researchers for this study are, (1) Observation, observation is one way to collect data carried out by looking directly at events in the field. Researchers use observation as one of the techniques to collect data. Observations were made when researchers were on duty in PKM activities at SDN Karet 04 Am. Due to conditions that do not allow students to see directly, researchers observed using the Zoom application when teaching PPKn lessons. (2) Questionnaires, questionnaires are one way to collect data that is not time-consuming because this method can be done *online*, such as using *google forms* or offline, using paper and filled out manually. According to Marsalis, a market or questionnaire is a data collection technique through a form containing questions that are asked in writing to a person or group of people to get answers or responses and information needed by the researchers (Mardalis, 2008:66) . Mardalis believes that a questionnaire or questionnaire is a form that contains questions challenging the necessary information. Data collection with questionnaires can take many forms, such as multiple choice or open-ended questions. Researchers used questionnaires as one of the data collection for grade 5 teachers in elementary schools, linguists, media experts, and students who participated in testing learning media. (3) Interviews are commonly

conducted in conducting research. Interview activities involve question and answer information between the source of information and the researcher. Rustenburg, in the book written by Sugiyono, explained that an interview is a meeting conducted by two people to exchange information and an idea utilizing question and answer so that it can be narrowed down into a conclusion or meaning in a certain topic (Sugiyono, 2015: 72). Estenburg believes that the interview is a conversation between two people who are doing a question and answer and the source of information is sending information to the recipient. Interviews are expected to gather complete information for the success of this study effectively.

Evaluation Techniques

The evaluation technique used in this study is a quantitative descriptive statistical analysis technique. The definition of quantitative descriptive statistical analysis techniques, according to Sugiyono, is statistics that are used to analyze data by describing or describing the data that has been collected as it is without making generally applicable conclusions or generalizations (Sugiyono, 2008: 407). It is explained that quantitative descriptive statistics analyze and take data as is without any additions or conclusions to use. Likert scale analysis *techniques were* used in this study. The *Likert* scale serves to measure the nature and opinion of a person over the events that occurred. Data collection was carried out using a questionnaire instrument, a questionnaire assessment using *a rating scale* of 1-4 with a description, a score of 1 with a strong disagreement, a score of 2 with a statement of Disagree, a score of 3 with a statement of Agree, and a score of 4 with a statement of Strongly Agree. After the data has been collected and obtained by the examiner, then calculate the average score obtained. The following is the formula used to calculate the questionnaire:

$$\text{nilai presentase} = \frac{\text{the number of scores obtained}}{\text{jumlah skor maksimal}} \times 100\%$$

After the percentage value is found, the researcher uses interpretation guidelines such as the table below according to the results of the percentage value.

Table 1.1

No	Percentage	Eligibility Categories
1	< 21%	Very unkind
2	21% - 40%	Not good
3	40% - 60%	Good enough
4	61% - 80%	Good
5	81% - 100%	Excellent

HASIL PENELITIAN DAN PEMBAHASAN

This research uses the ADDIE (*Analysis, Design, Develop, Implement, Evaluate*) development model. The following is an explanation of the development research conducted by researchers:

Analysis

At this stage, researchers conducted a needs analysis in the field to find out what problems occurred at the Karet State Elementary School 04 Am. Researchers conduct a needs analysis for students, homeroom teachers, and also materials in learning. When the researcher conducted PKM (Teaching Work Practice) at SD Negeri Karet 04 Pagi, the researcher found problems in the school. Schooling is currently carried out remotely due to the dangerous COVID-19 conditions, so the government has made all school systems in Indonesia *online*. Initially, researchers found problems when making observations and then, to see in more detail problem, researchers continued to analyze the problem by interviewing school teachers. The problem found in the field is that limited knowledge of technology makes homeroom teachers v can only use Whatsapp and Youtube for learning, when in fact, in the field, this media assistance is not enough to help schools learn online. In the analysis of problems carried out to students in class, v researchers found that students are easily bored with the current media, especially in the absence of other variations that make learning media attractive. This makes it less likely to provoke students to want to learn and attend school *online*. Based on interviews, it can be concluded that students want to learn with interesting media, and entertainment can make students active when learning, even though it is done remotely.

Design

After conducting the next analysis stage, the researcher made a design based on the results of the analysis of problems found in the field. Learners put forward learning media that they find interesting and researchers formulate it in such a way that it is following the will of the learners and according to the characteristics of the learners who are sitting in the v grade. The creation of this interactive media is carried out with the help of *Articulate Storyline software*. Interactive learning media will later be in the form of Html links that can be opened on electronic devices such as *smartphones*, laptops, and computers.

Development

At this stage, researchers have begun to create interactive media with designs that have been made before. With the help of *Articulate Storyline software*, researchers are helped a lot in creating interactive media because of the features that make it easier for owners to combine audio and visuals as well as possible. After the interactive media is completed and can be used, the researcher then conducts a validation test for the *expert review*. *This expert review* consists of media experts, material experts, and linguists. For media experts, researchers entrust Mr Drs. Dudung Amir S., M.Pd, is a lecturer at Jakarta State University and is a validator who assesses the feasibility of products from the media side. For material experts, researchers entrustEd Dr . Otib Satibi Hidayat, M.Pd as a lecturer at Jakarta State University as a validator who assessed the product's content from the material side. Finally, for linguists, researchers entrust Mrs Rahma Purwahida, S.Pd., M, Hum as a validator who assesses the feasibility of products from the language side. The following are the results of the assessment of the questionnaire already filled out by experts.

Table 1.2

Recapitulation Table <i>Expert Review</i>			Information
No	Expert Respondents	Percentage	
1	Media Expert	97%	Excellent
2	Material Expert	92%	Excellent
3	Linguist	95%	Excellent

Furthermore, the trial stage was carried out for students. In this study, trials for students were carried out in 3 types: *one-to-one*, *small group*, and *field test*. The *one-to-one* test is usually carried out by 3 to 5 students. Here researchers use 5 students to participate in using *articulate Storyline* learning media for learning PPKn grade 5 in elementary school. *Small group trials* are usually carried out by 6 to 10 people. Here researchers use 10 students to participate in using *articulate Storyline* learning media for learning KDP grade 5 in elementary schools. 15 to 20 students usually carry out field test trials. Here researchers use 20 students to participate in using *articulate Storyline* learning media for learning KDP grade 5 in elementary schools. The following is a table of assessment results from questionnaires that have been filled out by students who took part in the trial.

Table 1.3

<i>One to One, Small Group, and Field Test</i> Recapitulation Tables.		
No	Trial	Percentage
1	<i>One to One</i>	99%
2	<i>Small Group</i>	98%
3	<i>Field Test</i>	98%

Based on the results of the questionnaire assessment, all 3 kinds of trial scores for students were categorized as **Excellent** information.

Implement

After carrying out the *Development* stage, researchers enter the next stage, the Implementation stage, where this class is prepared for the actual PPKn learning, which contains all students in class v at SDN 04 Karet. In actual learning, the learning media products made by researchers are used to see the product's effectiveness. The researcher did not reach the implementation stage because this study was only up to the product feasibility test. During this study, effective tests for students could not be carried out due to the COVID-19 pandemic,

which made researchers carry out limited activities and research, so researchers need to pay attention to the space for students and researchers to carry out.

Evaluate

The last stage carried out in the ADDIE study is evaluation. Evaluation is conducted to find errors and problems arising when learning media products are used. These mistakes and problems will then be revised and corrected to provide perfection in every aspect of the learning media product created. The evaluation stage in this study was not carried out because the implementation stage was not carried out, so there was no data that could be analyzed to obtain evaluation results from the use of the product by students.

CONCLUSIONS AND SUGGESTIONS

The conclusion obtained from the research on the Development of *articulate storyline* interactive learning media based on *mobile learning* for PPKn content is that this media product can be used for grade 5 students. The *articulate storyline* interactive media product based on *mobile learning* on PPKn content is in great demand by grade 5 students as evidenced by the average results of the questionnaire value from 3 kinds of trials carried out by getting an average score of 96% of the trials which fall into the Very Good category. Not to forget also, experts who are certainly experienced in their respective fields support this *Storyline articulate* interactive learning media product by providing high scores. The average of all questionnaires filled out by experts is 94%, who fall into the Excellent category. The Development of *articulate Storyline* learning media products based on *mobile learning* content PPKN can be used for students in grade 5 elementary school by paying attention to several suggestions, namely:

1. In using this media, teachers must prepare electronic devices that can be connected to a stable internet so that this learning media will be perfect without obstacles.
2. To the teacher, this media can be used to increase the variety of learning media that makes it easier for students to learn.
3. To the next researcher, this research can be used as a reference for research on interesting learning media to be developed so that it has a more creative and innovative learning media for students who are in school.

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