

## ARCHIPELAGO TRADITIONAL HOUSE APPLICATION BASED ON ARTICULATE STORYLINE 3 IN GRADE FIVE ELEMENTARY SCHOOL

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**Abstract:** Traditional House learning material in content There are many Pancasila education lessons, causing results for students in low V classes. Study This aims to develop learning media from the Archipelago Traditional House Application based on Articulate Storyline 3 in class V elementary school. This research uses research and development (R&D) as a research method and ADDIE development model. Subject from study This is students, class teachers, and team experts. Data collection techniques used are test and non-test. The data analysis techniques used are descriptive qualitative and descriptive quantitative. Research data This was obtained through interviews, observations, and a questionnaire. Validation results in media experts of 92% and experts material of 91% show that The Archipelago Traditional House Application is very feasible to use. Learning outcomes pre-test and post-test show the average difference is 30, which means there are enhanced results for Study students. The average value obtained based on calculating the N-Gain score is 72%, which means the media is effective. For increased results, Study students. Response results show that media use by students is 92% and that of teachers is 90%, meaning the media is effective for application in learning. Therefore, the Archipelago Traditional House Application based on Articulate Storyline 3 is feasible for application in learning and can increase results for students in Class V Elementary School.

**Keywords:** Articulate Storyline, Learning Media, Pancasila Education

## **INTRODUCTION**

Education changes people's behavior to develop their potential (Satrio Ardian, Wulan Kisty Hasanah, 2020). Education is used as a medium to encourage students to become intelligent human beings (Restyani, 2018). Education is very important for the continuity of human life because, with education, humans can develop their potential in intelligence, character, and skills that will be useful in overcoming problems in life and developing innovations that will make human life easier. Education is important because it can advance a nation (Shahroom, A. A., & Hussin, 2018). Vice versa, the country will need education (Sutrisno Sahari, 2020).

Based on the Decree of the Head of BSKP Number 8 of 2022, Pancasila Education is a subject that instills values in all aspects of life. The national identity of Pancasila is used as a reference for Pancasila Education to produce citizens who can think globally with local behavior (Peraturan Mendikbud, 2022). Pancasila Education is a science that teaches students how to uphold the basic principles of the Indonesian state and how to be a good citizen. (Murtiana, A. D., Isnaini, Z., Widodo, S. T., Wahyuni, N. I., & Ulfa, 2023). Pancasila education in schools aims to grow character according to the values of Pancasila. Therefore, its implementation must be done within the time frame.

Today, many teachers are still unable to adapt to the times. Many teachers could use technology more optimally, especially in education. Seeing this fact, inevitably, teachers are required to master technology that supports learning. Technology is useful in improving the quality of education and can solve problems in education (Wulandari, I. G. A. A. M., Sudatha, I. G. W., & Simamora, 2020). By utilizing technology, students can learn to communicate, collaborate, be innovative and creative, and think critically with the hope that in the future, their knowledge and skills will become a provision of life in the community. (Hasrah, 2019) There are several benefits of using technology in learning activities, including increasing the quality of learning activities, increasing access to learning and education, developing depictions of abstract ideas, making it easier to understand the learning material being explored, making the appearance of learning material more attractive, and becoming a link between material and learning. Learning media is one example of the use of technology in education (Rahmi, 2020). There is a need for learning media innovation so that learning activities become better. One important factor in learning is using media (Wulandari et al., 2023). Learning media will attract students' attention (Rahmayani, 2019). Using learning media that suits the needs and character of students will determine success in the learning process (Waluyo, 2021).

Learning media is something used to convey the purpose of learning material delivered by educators to students in learning activities by the conditions of learning activities (Khotimah, 2021). According to (Tri Wulandari, 2022). learning media can facilitate students' understanding of learning

material and make learning activities effective because they can bring up learning concepts from the results of their thinking. Well-packaged and interesting learning media can be used for entertainment and education (Nur, 2021).

The results of interviews and observations that have been conducted show that there are still several problems and obstacles in learning, including in learning Pancasila Education, especially in the material of Traditional Houses. Students need help because they have to memorize much material. In addition, the learning pattern of Pancasila Education is still dominated by the teacher center, so learning is less interactive. Teachers usually use the jigsaw learning model so that students can only understand a little material, even though learning is done in groups. In delivering the material, the teacher uses the lecture method and several times uses the discussion method to make the material less varied. The learning media used are pictures. This makes learning media development too ordinary, so it is less interesting. IT-based learning media also needs to be developed more. At the same time, the facilities and infrastructure support the development of IT-based media. This can be seen when several classes already have LCD projectors, speakers, and laptops. From the interview, the main reason for not developing technology-based learning media is time constraints and teacher limitations in developing technology-based media. The development of limited learning media will affect student learning outcomes. Based on the learning results of the V class, Pancasila's education still needs to improve. This is evidenced by the unsatisfactory final exams semester one scores. Of 22 students, 8 (36.36 %) exceeded the minimum completeness criteria score. At the same time, 14 (63.64%) Students who get a score below the minimum completeness criteria. The minimum completeness criteria for Pancasila Education is 70.

Seeing this problem, researchers are trying to present a solution by developing an interactive learning application for Pancasila Education regarding Indonesian Cultural Wealth, especially traditional house material. This media functions to increase students' understanding of learning material. Apart from that, student learning activities are more enjoyable.

The Articulate Storyline 3 application is a technology that makes learning (Darnawati., Jamiludin., Batia, La., 2019). Articulate Storyline is an interactive multimedia with video, audio, images, graphics, text, and so on (Putri, T. J. E., Dewi, C., & Prasasti, 2022). Articulate Storyline has tools and displays that resemble PowerPoint (Saski, N. H., & Sudarwanto, 2021). The same thing was stated by & Handayani, 2021). Articulate Storyline 3 is a tool that can bring up interesting presentations. (Saski, N. H., & Sudarwanto, 2021) Argues that Articulate Storyline 3 is a learning tool with an attractive design and an electronic system that is useful in learning activities. Based on some of these expert opinions, Articulate Storyline 3 is concluded as an interactive learning media

with various features that can present learning material interestingly. Utilizing articulate storylines in making learning media is hoped to increase understanding of learning material.

Relevant research on Articulate Storyline in learning was conducted by (Firdawela I., 2021), who argues that Articulate Storyline 3 can be implemented in learning activities by bringing up material combined with images, text, animation, and sound. This will make the material interesting and increase student learning activity. Furthermore, (Nurmarwaa et al., 2022) believe that using Articulate Storylines helps teachers because they can convey material to students from the interactive media it produces. In addition, the Articulate Storyline is attractive and easy to use, which helps students understand the material. The same thing is also seen in research (Kamilah, 2022). Articulate Storyline is suitable for both groups and independently to create effective learning activities. From some of these studies, an Articulate Storyline is a suitable learning medium to help improve students' literacy and knowledge skills so that the learning process becomes fun and practical and positively impacts students. Based on this background explanation, the researcher aims to develop the Archipelago Traditional House Application based on articulate storyline 3 to increase student interest in learning, provide more enjoyable learning, and improve student learning outcomes on the material of the archipelago's traditional houses in grade five.

## **METHODS**

The method used in this research is Research and Development (R&D). Research and Development (R&D) research is conducted to produce a product and then test the effectiveness of the product. The development model used is the ADDIE development model. The ADDIE development model has five stages: analysis, design, development, implementation, and evaluation. At the analysis stage, the needs of teachers and students were analyzed, and student learning outcomes were analyzed. At the design stage, the media design of the Archipelago Traditional House Application, lesson plans, and assessment instruments were made. The development stage was done by making the Archipelago Traditional House Application media and material and media expert validation tests. The implementation stage involves implementing the product in small and large group tests. The last stage is evaluation, which evaluates the results of small and large group tests and the responses to media use.

The product was developed as an application of the Archipelago Traditional House Application based on Articulate Storyline 3 on Pancasila Education for fifth-grade students. The data in this study are in the form of the final exam scores of semester 1 of the VA class of SDN Tambakaji 05, data on the results of the VB SDN Wonosari 02 class test questions, data on the results of the pre-test and

post-test of the trial use of learning media for the VA class of SDN Tambakaji 05. The data source of this research was obtained from interviews with VA class teachers of SDN Tambakaji 05, observations, filling out questionnaires, VA student learning outcomes, and documentation. The subjects of this study were 22 students, consisting of 10 female students and 12 male students, as well as class teachers and a team of experts (material experts and media experts).

The data collection techniques used were tests and non-tests. The test technique is used to measure students' abilities. The tests were in the form of pre-tests and post-tests. Pre-test is done at the beginning of learning or before using learning media. A post-test is done at the end of learning or after using learning media. Non-test techniques in the form of interviews with VA class teachers of SDN Tambakaji 05, observations during the trial use of media in learning, media needs questionnaires by teachers and students, assessment questionnaires by material experts and media experts to test the feasibility of media, as well as questionnaires on responses to the use of the archipelago's traditional house application, as well as documentation of learning outcomes of the final exam of semester 1, pre-test and post-test learning outcomes in small group and large group trial classes.

The data analysis techniques used were descriptive qualitative and descriptive quantitative techniques. Media feasibility testing was carried out by two teams of validators consisting of experts in the field of material, especially Pancasila Education, with a lecturer in elementary school teacher education (PGSD), namely Mr. Susilo Tri Widodo, S.Pd., M. H. and experts in the field of media namely Mrs. Dewi Nilam Tyas, S.Pd., M.Pd. also a lecturer from elementary school teacher education (PGSD). The research analysis method is divided into four stages, namely pre-research data analysis; test questions in the form of validity, reliability, difficulty level, and differentiability tests; preliminary data analysis; and final data analysis in the form of normality tests, homogeneity tests, t-tests, and n-gain tests. Data analysis used the help of SPSS 25 for Windows.

## **RESULTS AND DISCUSSIONS**

Three main things discussed in this research are the development, feasibility, and effectiveness of the Archipelago Traditional House Application. Researchers use a problem-based learning (PBL) learning model. The Problem Base Learning (PBL) model makes students acquire many skills rather than just memorizing learning materials (Styowati, E., & Utami, 2022). This model can make students skilled in communication, teamwork, innovation, and creativity (Saepuloh et al., 2021). Problem-based learning (PBL) is a learning model that uses problems to collect and integrate new information (Safithri, R., Syaiful, S., & Huda, 2021). There are several steps to using the PBL model: orienting to the problem, organizing to learn, guiding the investigation, presenting the deliver and present

results of the work, and analyzing the problem-solving process (Rahmadani, R., & Taufina, 2020) in the feasibility stage of the Archipelago Traditional House.

At this stage of analysis, researchers conducted identification through interviews, observations, and document studies. Three analyses are carried out: curriculum, needs, and student analysis. Curriculum analysis determines the curriculum and the learning outcomes used in class VA SDN Tambakaji 05. The curriculum used in learning in class VA SDN Tambakaji 05 is the 2013 curriculum. Learning outcomes focus on the content of cultural diversity. A needs analysis is carried out to determine the problems that occur in learning. Based on the results of interviews with the VA class teacher of SDN Tambakaji 05 in learning Pancasila Education material on traditional houses, students need help because they have to memorize much material.

Next, at the design stage. In this planning stage, researchers made a media design for the Pancasila Education learning application on the material of the Archipelago's Traditional Houses, lesson plans, and assessment instruments. The media design stage consists of determining learning outcomes, formulating learning objectives and indicators, then compiling the material to be applied in the learning media, and making a storyboard to create a rough overview of the learning media. Researchers make learning plans in the form of complete learning devices consisting of the flow of learning objectives; teaching modules with PBL models according to the curriculum used, namely the 2013 curriculum; teaching materials consisting of the definition of traditional houses, the functions of traditional houses, and the characteristics of 38 traditional houses in the archipelago along with pictures of their houses; Learner Worksheets; description of learning media; and ten evaluation questions. The assessment instrument is a questionnaire given to material experts, media experts, teachers, and fifth-grade students.

In the development stage, researchers made the Archipelago Traditional House Application media. The development stage begins with determining colors, making slide designs, and applying materials, images, and videos. The slide background is made with the help of the Canva application by choosing bright colors and providing animation. Videos in the form of animated images in slides made in Canva are then given background music, text, and explanations that are put together in the Capcut application. The game was created using the Wordwall application. Then, the use of the Articulate Storyline 3 application, with the application creation steps starting with downloading the Articulate Storyline 3 application and then registering an account. After that, create a new project. This project consists of slides. The next step is to enter the material, images, animations, videos, and background into the storyboard made in the planning stage. After everything is done, then publish it on the web. To turn the web into an application form, help is needed from the Website 2 APK Builder

application. The application can be run using a smartphone. The results of media development are presented in Figure 1.



Figure 1. Media Initial Display

Applications have been developed and tested for validity by experts in material and media. Three aspects are assessed in the assessment instrument material: competency, suitability, and language. Meanwhile, the media assessment instrument covers four aspects: suitability, appearance, use, and advantages. The table of media validity test results can be seen in Table 1.

Table 1. Media validity test results

Respondent	Percentage	Criteria
Materials Expert	91%	Very Worth It
Media Expert	92%	Very Worth It

Based on Table 1, the validity test results of expert material are 91%, which is a very worthy category. Once, stage validation material was done with a suggestion to change the verb operational in the psychomotor domain—temporary validity test results in media experts by 92% with the Very Worthy category. Stage validation media experts also carried out once with a suggestion to add sentence invitations on the learning media slide for more interactive media. The slideshow after revision can be seen in Figure 2.

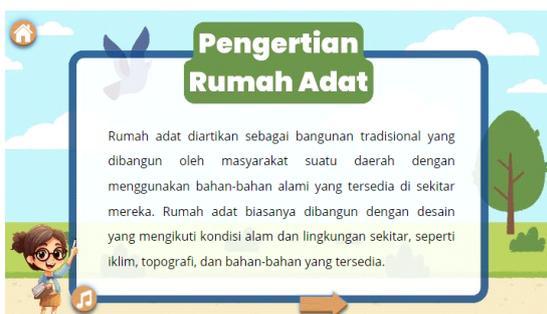


Figure 2. Slides before revision



Figure 2. Slides after revision

Stage implementation is done to know the appropriateness and effectiveness of existing learning media. The effectiveness of the media can be seen from the results of pre-test and post-test students in group testing small and test groups. A pre-test was done before using learning media, and a post-test was done after. Test small was done with nine students, and group big was held with 22 students grouped in class V based on level intelligence categories: high, medium, and low. The rating results of the cognitive group can be seen in Table 2

**Table 2.** Large Group Cognitive Assessment Results

Action	Minimal	Maximum	Average	Average Difference
Pre-test	35	75	57	30
Post-test	75	100	87	

Based on Table 2, the average score obtained from the results of the Study pre-test group big is 57, whereas, for the average value, the results of the Study group post-test big is 87. It is shown that there is a difference before and after using the Archipelago Traditional House Application. Learning outcomes show the average difference is 30, which means there are enhanced results for study students.

### **Evaluation Stage.**

Stage evaluation is the final stage in the study. Stage This contains N-Gain test results on results Study group big and results response media use by class V students and teachers. Group N-Gain test results can be seen in Table 3. The next result response is media use by students and teachers in Table 4.

**Table 3.** Large Group N-Gain Test Results

Action	Minimal	Maximum	Average N-Gain Score (%)	Category
Large Group Test	56	100	72	High

The results of the N-Gain Score calculation show that the average value of the large group N-Gain Score is 72%, including in the high category with a minimum N-Gain Score of 56 and a maximum of 100. The results of the N-Gain Score calculation show that using the Archipelago Traditional House Application with the PBL model effectively improves student learning outcomes

**Table 4.** Results of Responses to Media use by Students and Teachers

Respondent	Percentage	Criteria
Student	92%	Very Worth It
Teacher	90%	Very Worth It

Based on the results, the response media use by students is 92%, and teachers use it 90%, in the Very Worthy category. This matter shows the use of the Archipelago Traditional House Application with an effective PBL model for applied learning.

The Archipelago Traditional House Application was developed based on the needs of teachers and students. Using the ADDIE development model through 5 stages, namely analysis, design, development, implementation, and evaluation, helps researchers develop the Archipelago Traditional House Application, showing a systematic and structured approach. This research produces media in the form of Articulate Storyline 3-based Archipelago Traditional House Application with Problem Base Learning (PBL) learning model for grade V elementary school. The reason for choosing the Problem Base Learning (PBL) learning model is that students gain many skills rather than just memorizing learning material (Styowati & Utami, 2022). This model can make students skilled in communication, teamwork, innovation, and creativity (Saepuloh et al., 2021).

Archipelago Traditional House Application is an interactive learning media because students can directly use learning media both individually and in groups to increase their active participation (Adi, E. P., Ulfa, S., & Pratama, 2021). Articulate Storyline 3 as an interactive media can improve students' understanding of learning materials. Applying animated images, audio, text, video, and games in the Archipelago Traditional House Application is the right step to make learning more enjoyable and increase effectiveness. Articulate Storyline media has several advantages, including the features that it is easy to operate, has a quiz feature, and makes learning interactive because it involves students (Made Sri Indriani, 2021). (Darnawati., Jamiludin., Batia, La., 2019) the advantages of an Articulate storyline are that this application produces creative presentations and can be operated via laptop or smartphone. This media can be converted into various forms such as Compact Disc (CD), Web, Word Processing, or Learning Management System (LMS) so that it can be accessed offline or online (Yahya, 2020).

## **CONCLUSION**

The results of media expert validation amounted to 92%, and material experts amounted to 91%, with a very feasible category. The pre-test and post-test learning results show an average difference of 30, meaning there is an increase in student learning outcomes. Based on the N-Gain Score calculation results, the average value is 72%, with a high category. The results of responses to the use of media by students were 92% and teachers 90% with a very feasible category. Thus, the Articulate Storyline 3-based Archipelago Traditional House Application is feasible in learning and can improve the learning outcomes of Grade V Elementary School students.

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