



Development of Learning Media for Pencak Silat Materials Based on Articulate Storyline for Grade VI Students at SDN Sukorejo I

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ABSTRACT

Articulate Storyline is an application with numerous features, designed to facilitate students' understanding of pencak silat material. The purpose of this study was to develop learning media for pencak silat material based on an articulate storyline for grade VI students of SDN Sukorejo 1. The Research and Development method with the ADDIE model was used in this study by: (1) analysis, (2) design, (3) development, (4) implementation, and (5) evaluation. The samples involved in this study consisted of 30 grade VI students from SDN Sukorejo I and the PJOK teacher of SDN Sukorejo I. Additionally, several experts contributed to this study. Additionally, several experts contributed to this research. Additionally, several experts were involved in product validation, including a media expert, a material expert, and a physical education learning expert. The instruments used in this research are interview guidelines, product assessment questionnaires, and documentation. This articulate storyline learning media obtained 97% from the Media Expert with very valid criteria, obtained 96% from the Material Expert with very valid criteria, obtained 98% from the Learning Expert with very valid criteria, the PJOK Teacher SDN Sukorejo I test obtained 99%, and the field test obtained 88% with very valid criteria. Based on these results, this approach is feasible for use in the learning process.

Keyword: Learning Media, Articulate Storyline, Pencak Silat

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INTRODUCTION

According to Hidayat & Abdillah (2019), Education is a fundamental need for humans because it plays a crucial role in the development of nations and countries through their human resources. The complexity of change and growth is caused by science and technology (IPTEK). As a result, social problems and new demands are difficult to predict. As a result, Education continues to face challenges, mainly due to the gap between expectations and the results achieved from the education process. Education has a general goal of achieving the physical and

spiritual maturity of students. Physical growth in this context refers to the peak of physical growth that a child can achieve. Meanwhile, spiritual maturity means the child's ability to solve their problems and take responsibility for all their actions.

The educational process involving physical movement, which produces changes in individual qualities whether physical, mental, or emotional is the basis of physical Education as a whole. However, in reality, Physical Education is a broad field of study (Darnawati et al., 2019). According to Widodo & Azis (2018), PJOK helps children develop motor skills, physical insight, and deepen various values (attitudes, mental, emotional, spiritual, and social). The purpose of physical Education, sports, and health is to encourage balanced growth and development. Martial arts such as pencak silat are included in PJOK. Learning pencak silat in a school environment aims to provide an understanding of the nature of pencak silat and the values it embodies.

As is well known, Education, with its current curriculum, namely the independent learning curriculum, must incorporate technology to embrace the era of the 5.0 revolution, where the integration of learning with technology can open up new, innovative, and creative opportunities. The Merdeka Belajar curriculum is designed to keep pace with the times and address the challenges that arise in the Indonesian education system (Hamdi et al., 2022). The goal of the Merdeka Belajar curriculum is to give students the freedom and flexibility to organise their learning according to their interests and talents. The role of the teacher as a learning facilitator in this context becomes increasingly important. Teachers as learning facilitators must be able to utilize technology as an effective tool and accept diverse students (Nastiti & 'Abdu, 2020). When discussing the impact of technology on Education, teachers should consider how technology can enhance Education in ways that are both engaging and beneficial to students. Effective learning focuses on applying concepts and theories to students' daily lives (Pamungkas, 2023). According to Anam et al. (2021), the use of digital media by teachers can create a classroom atmosphere that is not passive, with mutual interaction between teachers and students during the learning process.

One example of the use of digital media in the PJOK learning process is the utilisation of an interactive learning media platform that leverages technology. An

important component in the educational process is learning media. To convey the lesson's message and content, the teaching orientation stage and the use of learning media are necessary. To convey the lesson's message and content, the teaching orientation stage and the use of learning media are necessary (Junaidi, 2019). According to Wulandari (2023), the Media is essential in learning, and teachers must pay attention to its important role in helping students learn. Therefore, it is essential to select the appropriate media to facilitate the achievement of learning objectives, thereby enhancing the effectiveness, efficiency, and enthusiasm of the learning process. Thus, teachers must prepare learning media for the learning mechanism. In addition, the absence of learning tools or media will complicate the learning process, making it less smooth and causing students to become easily bored.

The results of the initial observation (needs assessment) conducted in July 2024 were based on a direct needs analysis using a questionnaire. They experienced difficulties with the material of pencak silat, including the theory, movement, methods, and the use of books in learning. Obtained class VI students as many as 30 students, among others, who feel difficulties in learning pencak silat, with answers agreeing with a percentage value of 93.33% and there are fewer agreeing with a percentage of 6.67%. Students do not fully understand the pencak silat material taught by their teacher, with a percentage of 93.33%. In learning pencak silat material, the method used is a lecture with a 100% participation rate. Students disagree with the use of the lecture method because it is less fun, with a percentage of 83.67%. In learning pencak silat, students use the student Companion Book with a percentage of 100.00%. In learning pencak silat, teachers never use interactive media with a percentage of 96.67%. Students prefer fun learning media with answers, with 66.67% agreeing and 23.33% strongly agreeing. Grade VI students 100.00% already have their cell phones.

Furthermore, the initial observations were conducted in July 2024, and interviews were held with PJOK teachers. For the results of interviews with PJOK teachers stated (1) learning year using the independent curriculum, (2) in teaching, teachers still use the lecture method, (3) In the learning process, the use of teaching media only uses student companion books and modules, (3) According to the PJOK

teacher of SDN Sukorejo1 for teaching media in the learning process in the classroom has not been effective, (4) According to the PJOK teacher of SDN Sukorejo 1, there is a need for teaching media in the learning process that is adapted to the development of current technology, (5) for facilities and infrastructure in schools are adequate such as projectors, laptops, chromebooks, LCDs, WIFI, and others, (6) For the use of facilities and infrastructure at school students can use students. However, with limited use, (7) For the use of devices, laptops, and Chromebooks can be brought and can only be used when learning takes place.

From the learning methods used, the lecture method, which relies on a single learning source, namely books, can make students bored and less interested in learning, because in sports Learning, students are less inclined to read descriptively (Lubis & Agus, 2017). In learning PJOK, it is essential to have teachers who are innovative and creative in delivering material to make it interesting, motivating, and facilitate students' understanding of theory and practice (Makhlis, 2021). Based on the results of the needs assessment, the reason for using this articulate storyline is that the lecture method is still commonly used by teachers, who primarily rely on learning resources such as student companion books and modules. Hence, there is no variation in learning media; teaching methods are less interesting and less engaging, and the learning media applied at SDN Sukorejo I are not utilized effectively.

Previous research has discussed the development of articulate, storyline-based learning media containing pencak silat material, such as pencak silat game steps, videos, and evaluation questions, supported by media including images, music, and videos (Aulia & Kurniawan, 2021). Furthermore, similar research, as developed in the study, only contains basic pencak silat techniques, utilising the CourseLab 2.4 program with the incorporation of several media, such as text, animation, images, videos, and sound (Angga et al., 2020). Furthermore, similar research has been conducted, such as Marwan's (2018) study, which utilized the WhatsApp application and produced learning videos of martial arts movements. Therefore, based on the description of the problem, the researcher attempted to provide a solution by using "Articulate Storyline," which utilizes technology that is currently developing in the Industry 5.0 era, to develop learning media containing

PJOK objectives, learning outcomes, learning objectives, pencak silat modules, the history of pencak silat, pencak silat material, definitions, and videos on basic pencak silat techniques, and pencak silat practice questions for sixth-grade students at SDN Sukorejo I.

METHODS

The Research and Development method with the ADDIE model was used in this development research according to Robert Maribe Branch (2009), namely by: (1) Analysis (Identify the probable causes for a performance gap), (2) Design (Verify the desired performances and appropriate testing methods), (3) Development (Generate and validate the learning resources), (4) Implementation (Prepare the learning environment and engage the students), and (5) Evaluation (Assess the quality of instructional products and processes, both before and after implementation). In product trial research, the subjects involved in this product development research are (1) field trial subjects of grade VI students of SDN Sukorejo 1 as many as 30 students, (2) PJOK teacher test subjects of SDN Sukorejo I, (3) Evaluationintern subjects from experts, namely, one media expert (Expert with expertise in the field of media, minimum 3-5 years of work experience, and minimum bachelor's degree in multimedia), one learning expert (Expert in the field of learning, with a minimum of 4-6 years of academic experience), and one martial arts expert(Expert in pencak silat, with a minimum of a Master's degree, and at least 7 years of experience in pencak silat).

Questionnaires are the type of data collection method used in this study, with aspects of Clarity, Accuracy, Ease, Attractiveness, and Suitability. At the same time, data analysis techniques and product development use descriptive statistics. Data collection employs a Likert scale in its measurement because it aims to assess the perceptions and attitudes of individuals and groups regarding social phenomena (Sugiyono, 2022). A modified Likert scale by eliminating the "neutral" option. In the data analysis technique. Data from the Likert scale results are processed into descriptive quantitative percentages. Furthermore, it is used to determine product validity criteria to conclude (Akbar & Sriwiyana, 2011).

RESULTS AND DISCUSSION

The feasibility of product development is known from the results of data acquisition. In the data analysis applied to assess development products, researchers explain the results of the data analysis, which consisted of one media expert, one martial arts material expert, one learning expert, PJOK Teacher SDN Sukorejo I, and field trials.



Figure 1. Learning Media Cover



Figure 2. Menu Display



Figure 3. Barcode Website



Figure 4. Barcode Aplikasi

In the learning video, there is material on the basic movements of pencak silat, including respectful attitudes, upright attitudes, postures, stances, step patterns, punches, kicks, evasions, stances, variations, and combinations of fundamental movement patterns of punches, kicks, stances, and evasions, as well as warm-ups and cool-downs, there is also a history of pencak Silat, learning achievements, and learning objectives. In this learning media, students can also complete exercises through Google Forms.

Media Expert Data Analysis

Presentation of the results of data analysis conducted by a media expert, assessing Different aspects, is presented in Table 1.

Table 1. Results of Media Expert Data Analysis

No	Aspect	Feasibility	Category
1	Attractiveness	100%	Very Valid
2	Suitability	92%	Very Valid
3	Clarity	92%	Very Valid
4	Easy	100%	Very Valid
5	Usability	100%	Very Valid
Average		97%	Very Valid

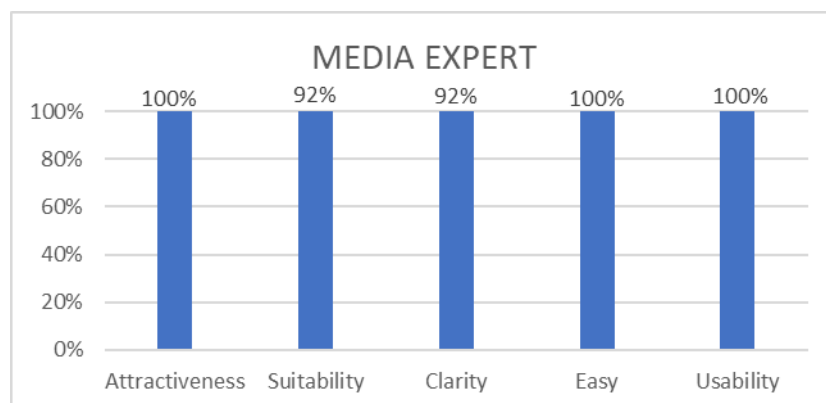


Figure 5. Bar Diagram of Media Expert Data Analysis Results

According to the media expert test results, 97% of the average values for attractiveness, suitability, clarity, ease, and usability were obtained, and they fall into the "Very Valid" category. The presentation of the results of data analysis conducted by a media expert, assessing different aspects, is presented in Table 2.

Table 2. Material Expert Data Analysis Result

No	Aspect	Feasibility	Category
1	Clarity	95%	Very Valid
2	Accuracy	100%	Very Valid
3	Easy	94%	Very Valid
4	Attractiveness	88%	Very Valid
5	Suitability	100%	Very Valid
Average		96%	Very Valid

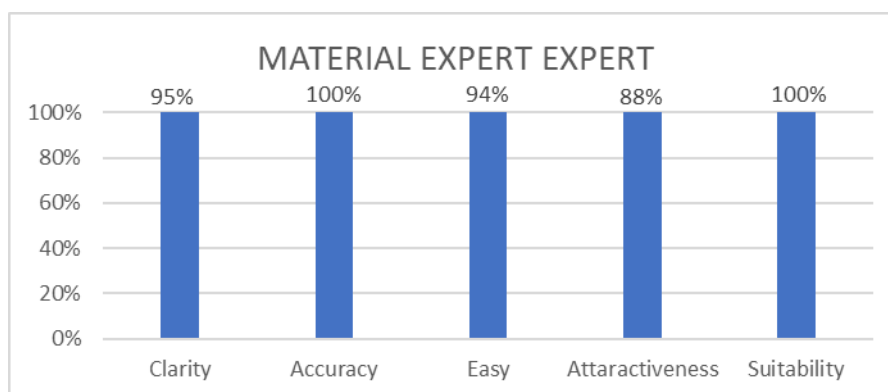


Figure 6. Bar Diagram of Material Expert Data Analysis Results

Obtained validation through material experts of 96% is categorized as feasible with a very valid category and can be tested in the field trial. Presentation of the results of data analysis conducted by a media expert, assessing Different aspects, is presented in Table 3.

Table 3. Learning Expert Data Analysis Result

No	Aspect	Feasibility	Category
1	Clarity	100%	Very Valid
2	Accuracy	94%	Very Valid
3	Easy	99%	Very Valid
Average		98%	Very Valid

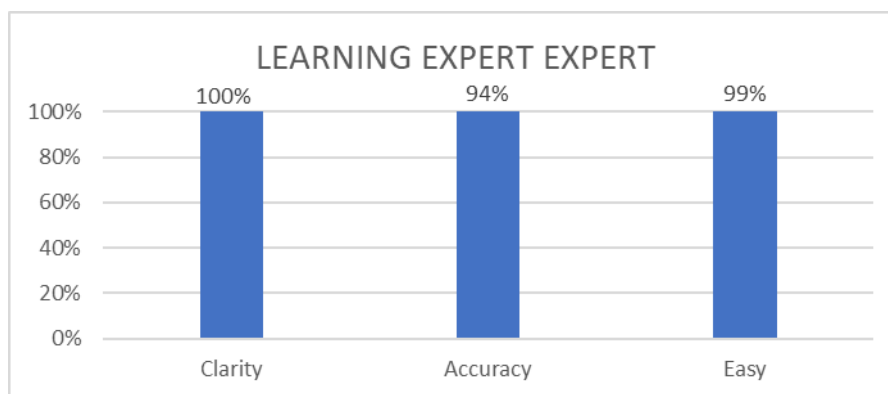


Figure 7. Bar Diagram of Learning Expert Data Analysis Results

Obtained validation through Learning experts at 98% is categorized as feasible with a very valid category and can be tested in field trials. The presentation of the results of data analysis conducted by a 1 PJOK teacher at SDN Sukorejo 1, by assessing different aspects, is presented in Table 4.

Table 4. Result of Data Analysis of PJOK Teacher SDN Sukorejo I

No	Aspect	Feasibility	Category
1	Attractiveness	100%	Very Valid
2	Easy	100%	Very Valid
3	Suitability	95%	Very Valid
4	Clarity	100%	Very Valid
5	Usability	100%	Very Valid
Average		99%	Very Valid

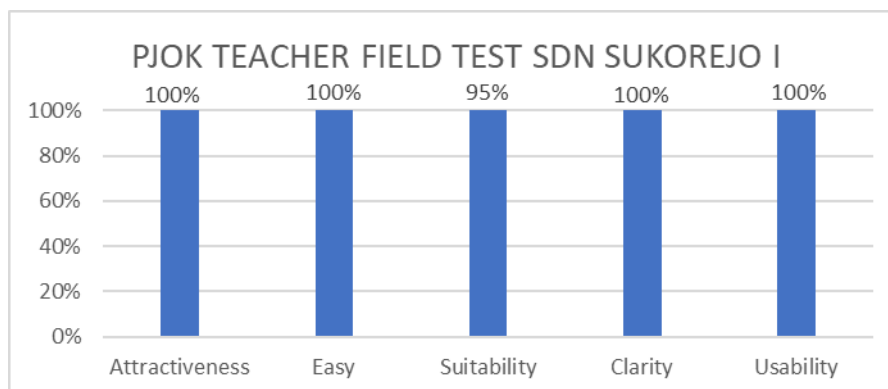


Figure 8. Diagram of Data Analysis of PJOK Teacher of SDN Sukorejo I

Obtained validation through the field test of the PJOK teacher at SDN Sukorejo I, of 99%, categorized as feasible, with a very valid category, and can be implemented in the field trial. The presentation of the results of data analysis conducted by 30 grade VI students, assessing different aspects, is presented in Table 5.

Table 5. Result of Field Trial Data Analysis

No	Aspect	Feasibility	Category
1	Attractiveness	85%	Very Valid
2	Easy	87%	Very Valid
3	Suitability	87%	Very Valid
4	Clarity	91%	Very Valid
5	Usability	92%	Very Valid
Average		88%	Very Valid

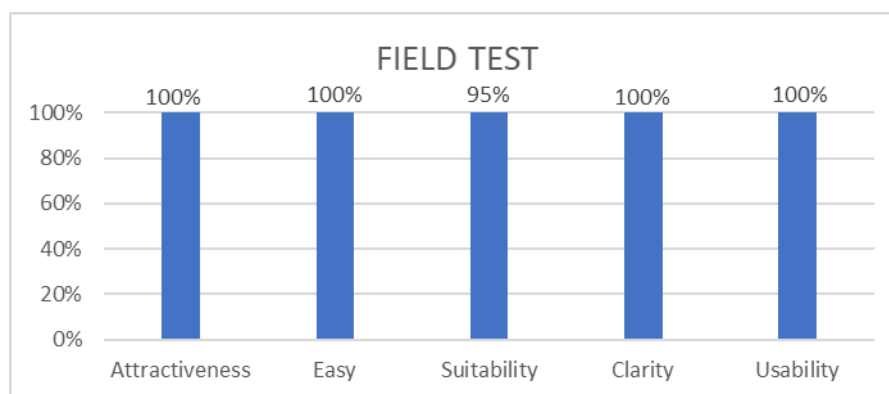


Figure 9. Diagram of Field Test Data Analysis of PJOK Teacher of SDN Sukorejo I

In the field test, 88% of the participants found the articulate storyline-based martial arts learning media development product to be very feasible for testing in the field and to have a high level of validity. The development of learning media based on Articulate Storyline, utilising pencak silat material at SDN Sukorejo, demonstrates that this product is overall suitable for use by students and teachers. The learning media developed contain learning outcomes, learning objectives, a history of pencak silat, basic pencak silat techniques, and practice questions, all accessible through Google Forms the Use of Media in the Learning Process. According to Mansyah & Kurniawan (2024), the concept of "learning effectiveness" refers to the proper utilization of media to achieve learning objectives. In the learning process, the use of media is inseparable and very

important. It is also important in the learning process to combine learning media as an innovative approach that utilizes emerging technology (Abdulah et al., 2020). The media can encourage students to be enthusiastic about learning (Hadi, 2024).

To develop 4C competencies (Critical thinking and problem-solving, Creativity, Collaboration, and Communication) in the 21st century, teachers utilize technology-based lessons for their students (Partono et al., 2021). This has made the transition from conventional media, namely print media, to technology-based media (Arwanda et al., 2020). Researchers developed learning media in the form of an articulate storyline application, one of the multimedia tools that make learning more interactive by combining content such as text, graphics, video, animation, photos, and sound. This application can be in the form of application files and web (HTML 5), application files can be used on smartphones and laptops (Amiroh, 2020). According to Hariyoko et al. (2018), the mastery of material and an individual's understanding of it in memory have limitations. Therefore, through the existence of learning media in the form of articulate storyline which contains learning outcomes, learning objectives, pencak silat material and demonstration videos and there are combinations and variations of kicks, punches, evasions, and parries, warm-ups and cool-downs, as well as practice questions so that students are easier to learn and easily remember pencak silat material, where this articulate storyline can be used offline and online so it can be used anytime and anywhere. This developed learning media contains images, text, videos, and basic pencak silat technique movements, and according to student needs, students want to learn fun pencak silat. The learning video effectively delivers the material, and students are actively involved in the learning process (Pebriani, 2017). With the help of video recordings in the learning process, students have the opportunity to observe, record, and analyze their movements individually (Greve et al., 2022).

The advantages of this development product include the following: (1) There are learning objectives and learning outcomes on pencak silat material, (2) this learning media is complete with pencak silat material consisting of: (a) the history of pencak silat, (b) There are explanations and videos of basic pencak silat techniques, consisting of respectful attitudes, upright attitudes, postures, stances, step patterns, punches, kicks, stances, and evasions, and There are videos of

combinations and variations of basic techniques of punches, kicks, stances, and evasions, as well as warm-up and cool-down videos, (c) There are practice questions using Google form, (2) This learning media is easy to operate with simple buttons, (3) Learning media can be used online and offline, (4) This learning media can be accessed anytime and anywhere. (5) Learning media can be accessed on laptops and smartphones.

The disadvantages of this development product include the following: (1) When installing on a smartphone, it takes 121 MB of storage space, (2) In practice questions, because it uses Google Forms, it requires internet access to do practice questions, (3) The trial was only conducted once in the form of a field test, (4) The trial was only conducted in 1 class with 30 students, (5) This learning media must go through the process of changing to an application on a smartphone with the help of other applications.

Based on the shortcomings of researchers in developing this learning media product, the focus is only on one school and one class. In addition, this development only focuses on pencak silat material, which contains learning achievements, learning objectives, pencak silat history, basic respect techniques, various upright attitudes, various postures, various stances, various step patterns, various kicks, various punches, various kinds of evasions, various kinds of parries, and combinations and variations of punches, parries, kicks, and evasions. Moreover, the practice questions can only be used online. Therefore, the next researcher can expand this development to several schools, multiple classes, a wider range of pencak silat materials, and other Physical Education, Sports, and Health (PJOK) materials, and create practice questions that can be completed offline.

CONCLUSIONS

The conclusion of the research on the development of learning media for pencak silat a material based on an articulate storyline for grade VI students of SDN Sukorejo I shows significant results, and the application of an articulate storyline is suitable for use as a learning medium for PJOK at SDN Sukorejo I. There are limitations to this development; it is hoped that future researchers will be able to create offline practice questions.

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