



PASAJA Media for Third Grade Elementary School Students' Javanese Script Writing Skills

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ABSTRAK

Penggunaan media pembelajaran yang kurang sehingga mengurangi minat siswa terhadap aksara jawa. Penelitian ini bertujuan untuk menciptakan media PASAJA untuk keterampilan menulis aksara jawa siswa kelas III SD. Jenis penelitian ini yaitu penelitian pengembangan atau Research and Development. Penelitian ini menggunakan model pengembangan menurut Borg and Gall. Subjek penelitian ini yaitu 1 ahli media dan 1 ahli materi. Subjek uji pemakaian sebanyak 30 siswa kelas III SD. Metode pengumpulan data menggunakan observasi, wawancara, kuesioner, dan dokumentasi. Instrumen yang digunakan dalam pengumpulan data adalah angket. Teknik yang digunakan untuk menganalisis data adalah analisis data awal berupa uji normalitas dan data akhir berupa uji t-tes dan uji n-gain. Hasil penelitian media yang dikembangkan dinyatakan layak dan valid dengan perolehan ahli media sebesar 87,5% dan ahli materi sebesar 90%. Hasil uji coba produk sebanyak 6 siswa adalah 90% kategori sangat layak. Hasil uji N-gain pada uji coba kelompok besar adalah 0,63 yang menunjukkan adanya peningkatan hasil belajar siswa pada kategori sedang. Simpulan penelitian menunjukkan media pembelajaran pasaja untuk keterampilan menulis yang dikembangkan sangat layak dan efektif digunakan sebagai media pembelajaran untuk meningkatkan keterampilan menulis kalimat sederhana aksara jawa.

ABSTRACT

Insufficient use of learning media reduces students' interest in Javanese script. This research aims to create PASAJA media for the Javanese script-writing skills of third-grade elementary school students. This type of research is development research or Research and Development. This research uses the development model according to Borg and Gall. The subjects of this research were 1 media expert and 1 material expert. The usage test subjects were 30 third-grade elementary school students. Data collection methods use observation, interviews, questionnaires, and documentation. The instrument used in data collection was a questionnaire. The technique used to analyse the data is initial data analysis in the form of a normality test and final data in the form of a t-test and n-gain test. The research results on the media developed were declared feasible and valid with a media expert score of 87.5% and a material expert score of 90%. The product trial results of 6 students were 90% in the very feasible category. The N-gain test result in the large group trial was 0.63, which shows increased student learning outcomes in the medium category. The research conclusion shows that the developed passage learning media for writing skills is very feasible and effective to use as a learning medium to improve writing simple sentences in Javanese script.

1. INTRODUCTION

Writing is communicating through writing. Writing functions as an indirect communication medium. Writing also helps critical thinking, problem solving, and organizing experiences (Nurcholis & Istiningsih, 2021; Safitri et al., 2021). Writing is a language skill that is considered difficult for students, especially for students who have low interest in reading. Writing skills are a way of conveying ideas, thoughts and feelings through written forms that have meaning (Aristhi & Manuaba, 2020; Asiah, 2018; RN Sari & Subrata, 2018). Writing skills in elementary schools are taught not only in Indonesian language learning, but also in formal learning processes in Javanese language learning. Javanese is one of the cultures

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in Indonesia. The primary and secondary education curriculum must contain local content, one of the local content in Central Java is the Javanese language (Bulan & Hasan, 2020; Yuniati Chasanah, 2022). Javanese Language, Literature and Literacy development is carried out in formal education units at junior elementary schools (SD)/equivalent, junior high schools (SMP)/equivalent, upper secondary schools (SMA)/vocational high schools (SMK)/equivalent. Javanese is a mandatory local content held at elementary school to high school levels (Pradana & Koeswanti, 2021). Several Javanese language learning skills in the 2013 curriculum include four aspects, namely listening, speaking, reading and writing (Joeniarni & Mulyoto, 2022; Mauludin & Subrata, 2020). One of the skills in learning Javanese is writing Javanese script. Javanese script is one of the materials taught in Javanese language subjects.

Javanese script is the script or letters used to write Javanese (Ilham & Rochmawati, 2020; Yuniati Chasanah, 2022). Javanese script is a part of Javanese culture that must be preserved. In order to understand the meaning behind ancestral heritage, the role of Javanese script is quite influential so it is important to study and understand (ATR Sari et al., 2023). One of the efforts made by the government is to include Javanese script in the educational curriculum (Ghazali et al., 2021; ATR Sari et al., 2023). Even so, most of this material is problematic for students. Students consider Javanese script material to be the most difficult. This is because the shape of the Javanese script is almost similar and is rarely found in everyday life. Based on the results of interviews conducted with class III teachers at SDN 01 Kesesirejo, it was stated that during the learning process, teachers had not used learning media optimally, so students' interest in Javanese script was still lacking. During the observation activity, the teacher conveys the material contained in the book and then writes Javanese characters on the blackboard. The results of the student and teacher needs questionnaire show that there are problems regarding students' needs for interesting learning media that can increase students' interest in Javanese script. The effort to overcome this problem is to create an innovation in learning as an effort to help teachers in the process of providing lesson material with learning media.

An effort to help with problems in the learning process is by developing Pasaja media (Javanese script puzzle) to help students understand the form of the Javanese nglegena script. Pasaja media is used to practice writing skills in the legendary Javanese script and provide students with an understanding of the Javanese script. Pasaja media can make it easier for students to memorize and practice writing the Javanese nglegena script. Javanese script puzzle media can be used individually or in groups with any learning method and model (Mutiarra Dilmansyah, 2019). The use of learning media in the learning process so that students are more motivated and interested in the material being taught (Amalia & Napitupulu, 2022). Learning media functions as a tool to attract students' interest and motivation in the learning process. Media is anything that can be used to transmit from sender to recipient so that it can stimulate students' thoughts, feelings, attention and interest in such a way that the learning process occurs (Joeniarni & Mulyoto, 2022; Kurnia & Damayani, 2019). Learning media is a component of learning resources or physical vehicles that contain instructional material that must be created, used and managed in the student environment so that learning needs take place effectively and efficiently (Arsyad, 2006). Puzzle is a type of game that rearranges small pieces of an image to see the information contained in the image (Mutiarra Dilmansyah, 2019). Puzzle media is media in the form of pieces that can be put together to form a whole, puzzles are an educational game that can improve and develop students' creativity (Maryana et al., 2021). These pieces of images can be a clue and stimulus for students to examine a desired response. Puzzle game media can increase student concentration, improve learning outcomes, increase student interest and intelligence (Yuniati Chasanah, 2022).

Previous research findings revealed that reading skills in the Javanese Legenda script can be improved by using Javanese script puzzle learning media in learning activities (Mutiarra Dilmansyah, 2019). Because puzzle media has the advantage of making it easier for students to read and memorize the forms of Javanese script which are different from the letters of the alphabet. Student learning outcomes for Javanese script material can be improved by using puzzle media so that it has a positive impact on the learning process (Astutik et al., 2020). Based on the results of this research, it can be concluded that puzzle media is a media that is suitable for use as a learning medium to help students' learning process. The difference between this research and previous research is that in this research the use of Javanese script puzzle media was used for the Javanese script writing skills of third grade elementary school students. This research aims to create PASAJA media for the Javanese script writing skills of third grade elementary school students.

2. METHOD

This research uses a type of development research or Research and Development (R&D), namely developing Pasaja learning media for Javanese script writing skills for third grade elementary school

students. This research uses the development model according to Borg and Gall. There are ten steps in research and development, including potential and problems, data collection, product design, design validation, revised design, initial trials, product revisions, usage trials, product revisions, mass production (Hidayah et al., 2020). The subjects of this research were 36 students of SDN 01 Kesesirejo Pemalang. Data collection in this research was using test and non-test methods. The data collection instrument used in this research is a media validation instrument consisting of media validation sheets and material validation sheets as well as student and teacher response questionnaire instruments. The data was collected using data collection instruments with media validation sheets and materials to determine the suitability of the learning media. The data collection instrument contains a Likert scale with 4 answer statement options. Below is a Likert scale measurement used to measure media and material validation presented in Table 1.

Table 1. Likert Scale Measurements

Information	Score
Score 4	Very good
Score 3	Good
Score 2	Pretty good
Score 1	Not enough

(Sugiyono, 2017)

Calculations using this formula will obtain the level of success of the media which is related to the level of validity of the media which can then be determined the level of success of media development using the criteria in Table 2.

Table 2. Media Assessment Criteria

No	Information	Score
1.	76% - 100%	Very good
2.	51% - 75%	Good
3.	26% - 50%	Pretty good
4.	0% - 25%	Not good

(Sugiyono, 2017)

In this study, the paired t-test analysis used by researchers used Ms. Excel. Paired t-test is used to test the hypothesis. The N-Gain test is used as an indication of data about student achievement or student ranking in class. as for the N-Gain test formula. Once the N-Gain value is known, the next step is to determine the criteria presented in Table 3.

Table 3. N-Gain Criteria Table

N-Gain Value	Criteria
$N-Gain \geq 0.70$	Tall
$0.30 < N-Gain < 0.70$	Currently
$N-Gain \leq 0.30$	Low

(Lestari & Yudhanegara, 2017)

3. RESULT AND DISCUSSION

Results

This research produces Pasaja learning media for Javanese language subjects, Javanese script material for simple sentence writing skills for third grade elementary school students. The resulting media is Pasaja learning media (Javanese script puzzle). This media consists of 20 puzzle boards measuring 8 cm × 8 cm, each letter of the Javanese nglegena script from ha to nga. The Pasaja media development process uses the development model according to Borg and Gall which consists of 10 stages, namely potential and problems, data collection, product design, design validation, revised design, initial trials, product revisions, usage trials, product revisions, mass production. Potential and problems are the stages carried out by researchers to identify existing potential and problems. This stage was carried out through observation and interviews with teachers as well as documentation of the learning outcomes of class III students at SDN 01 Kesesirejo related to learning media. The findings show the potential of students in the form of abilities in Javanese language subjects with Javanese script material. Meanwhile, the problem found was students'

interest in writing skills towards the Nglegena Javanese script material. At the information data collection stage in designing the creation of Pasaja media, researchers used a questionnaire of teacher and student needs as a benchmark in creating learning media. Through a media needs questionnaire, analysis of diverse and effective media needs for teaching and learning activities in class III does not seem boring.

Design is the stage carried out by researchers to design Javanese script puzzle media. Researchers prepare Pasaja media designs (Javanese script puzzles) which are adapted to core competencies, basic competencies (KD), learning indicators, completeness of Javanese script material content, instructions for using the media, and learning objectives. that must be achieved in learning activities. The design stage starts from preparing the puzzle concept, designing the media and then creating the Javanese script puzzle media. Products that have been developed by researchers are then validated by a team of experts, namely media expert validators and material experts. Design validation is carried out to improve the media created by the researcher so that it is suitable when the researcher carries out the media testing stage. The results from the assessments of media experts and material experts were 87.5% and 92.5% in the "very feasible" category. The next stage is the product testing stage. The product testing stage is carried out after the product has been revised. Product trials were simulated in small-scale groups with 6 class III students at SDN 01 Kesesirejo as members. The small-scale product trial aims to determine the feasibility of Pasaja media, students' interest in Pasaja media, as well as teacher and student responses related to Pasaja media. The results of the teacher response questionnaire obtained a percentage of 90% in the "very good" category. The product assessment percentage is presented in [Table 4](#).

Table 4. Product Assessment Percentage

Evaluator	Maximum score	Score obtained	Percentage	Criteria
Media expert	80	70	87.5%	Very Worth It
Material expert	80	74	92.5%	Very Worth It
Teacher Response		18	90%	Very good
Student responses		111	92.5%	Very good

The results of the student response questionnaire in the small group trial obtained 111 "Yes" answers and 9 "No" answers with a result percentage of 92.5%, the criteria being "very good." This shows that students agree with the use of the Pasaja media as material for Nglegena Javanese script. So that the Pasaja media was successfully used in small group trials which could then be tested in large group trials. The next stage is the trial use stage. The data taken in the trial use of Pasaja media products were the results of Javanese language scores which came from pretest and posttest scores using Pasaja media with Javanese script material. Pretest and Posttest results are presented in [Table 5](#).

Table 5. Pretest and Posttest Results

No	Information	Learning Outcomes	
		Pretest	Posttest
1	The number of students	30	30
2	The highest score	74	100
3	Lowest value	42	64
4	Complete number of students	3	28
5	Average	57	84

Based on [Table 5](#), in the large group trial the students who got the highest and lowest scores on the pretest were 74 and 42. The highest scores on the posttest were 100 and 64. The number of students who completed the pretest was 3 and the number of students who completed the posttest was 5 students. The average pretest and posttest scores are 57 and 84. The next stage is to analyze the initial data using the normality test. The normality test was carried out using the normality test from Liliefors. The normality test used the Liliefors test with a significant level of $\alpha = 0.05$ ($n = 30$) with an L_{table} result of 0.161. The pretest results have an L_{count} value of 0.419 and a posttest L_{count} value of 0.127. Thus, $L_{count} < L_{table} = 0.149 < 0.161$ for the pretest and $L_{count} < L_{table} = 0.127 < 0.161$ for the posttest, it can be concluded that L_{table} is greater than L_{count} , which means the data is normally distributed. After calculating the initial data, then analyzing the final data, namely analyzing the difference between the pretest and posttest averages (t-test), analyzed using the t-test to find out whether there is a significant difference or not. The results of the average difference test are in [Table 6](#).

Table 6. Average Pretest and Posttest Test Results

Data	T _{count}	T _{table}	Information
Pretest	8.327	2.048	H _α is accepted
Posttest			

Table 6 shows the results of the t-test for two dependent samples in the final large group test, with $t_{count} = 8.327$ and $t_{table} = 2.048$. From the calculation results, $t_{count} = 8.327 > t_{table} = 2.058$, so H_0 is rejected and H_α is accepted or interpreted as meaning that the Pasaja media is effectively used in learning to improve the learning outcomes of class III students in Javanese script material. Then the gain test aims to determine the average increase in pretest and posttest results for class III students at SDN 01 Kesesirejo. After calculating the average increase in pretest and posttest results using the gain test formula, the results are obtained in the form of a number called n-gain. The test results of the n-gain test are presented in Table 7.

Table 7. Results of N-gain Test analysis

Average		N-Gain	Criteria
Pretest	Posttest		
54	84	0.63	Currently

Based on the calculations in Table 7, it is known that the N-gain in the large group trial was 0.63. These results mean that the increase in student learning outcomes is in the medium category.

Discussion

The results of the research show that the pasaja learning media for writing skills that was developed is very feasible for improving skills in writing simple sentences in Javanese script. This is seen from several aspects. First, Pasaja media is included in the very appropriate category for simplicity of media, use of colors and objects, margins and print areas, spacing, typeface, font size, use of language, and use of media. Apart from that, color, background image, number of fonts, spacing between lines and letters, suitability of words and sentences, use of language, and media presentation. Media that can be used practically will make students feel less bored when learning (Heo & Toomey, 2020; Meyer et al., 2019). The very attractive appearance of the media also arouses students' interest. Media that is displayed attractively will increase students' enthusiasm for learning so that students are more motivated (Prayoga et al., 2023). Using the right background also attracts students to learn. The attractiveness of the media can attract students' attention so that learning becomes fun. The use of pasaja media is very suitable for increasing students' interest in learning and writing skills in grade I elementary school students.

Second, Pasaja media received a very worthy category from material expert validators. This is seen from the aspects of curriculum suitability, suitability of Core Competencies, student needs, interests, enthusiasm, making it easier for teachers to improve students' writing skills, making it easier for teachers to convey material, concentration, letter and line spacing. The media contains learning objectives that are in accordance with KD, making it easier for students to learn. Apart from that, it is also presented systematically so that the material can be understood clearly. Learning media that presents systematic material will certainly make it easier for students to learn (Marlina et al., 2021). Apart from that, this media is easy to understand because it provides students with experience. Providing meaningful experiences to students will make students' memories stronger, resulting in increased learning outcomes (Devi & Bayu, 2020; Laaser & Toloza, 2017; Prayoga et al., 2023). Pasaja media helps students who are entering the concrete operational stage so that it is easier for students to interpret and understand abstract material. Understanding the concept of learning really requires a tool that can be manipulated by students so that students get direct learning experiences and are stored in long-term memory (Sababalat et al., 2021; Widayanti et al., 2020).

Pasaja media (Javanese script puzzle) is effectively used in learning to improve class III student learning outcomes in Javanese script material. This finding is reinforced by previous research findings stating that reading skills in the Javanese Legenda script can be improved by using Javanese script puzzle learning media in learning activities (Mutiaru Dilmansyah, 2019). Student learning outcomes for Javanese script material can be improved by using puzzle media so that it has a positive impact on the learning process (Astutik et al., 2020). Puzzle media influences the science learning outcomes of the concept of the life cycle of living things in class IV students (Widiana et al., 2019; Widya, 2017). The application of the make a match model assisted by puzzle media can improve the science learning outcomes of fifth grade students in elementary school (Widayanti et al., 2020; Widyatmoko, 2019). The number head together (NHT) learning model assisted by puzzle media is effective for improving mathematics learning outcomes (Kurnia

& Damayani, 2019). The implication of this research is that media attracts students' attention so that it can improve students' writing skills. Password media can make it easier for teachers to teach so that teachers don't need to spell anymore when teaching in class. Pasaja media is very appropriate to use in learning calistung. This novelty in pasaja media is made different from previous research, namely by compiling the media by packaging it to write Javanese script.

4. CONCLUSION

Pasaja media has received high validity qualifications and is very practical from experts, practitioners and students and is effective in use. Just learning media for writing skills which has been developed is very feasible and effective to use as a learning medium to improve skills in writing simple sentences in Javanese script.

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