



Javanese Script Comic Strip "Si Kani": Character Education Learning Media of Serat Wulangreh

Pupuh Kinanthi

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Abstract

Javanese script is a subject in Javanese language classes, which often perceived as complicated. This study aims to: 1) describe the findings from the needs analysis for developing Javanese script comic strip learning media at SMP Negeri 1 Jatibarang for Grade VIII, 2) develop a prototype of Javanese script comic strip media containing the content of *Serat Wulangreh pupuh kinanthi*, and 3) analyze the results of expert validation and student responses to the developed comic strip media. This study used *Research and Development (R&D)* development. The research model used the ADDIE (*Analysis, Design, Development, Implementation & Evaluation*) development model. The analysis technique in this study was quantitative data analysis and qualitative descriptive analysis with data collection techniques in the form of observation, interviews, and questionnaires. This study involved 32 eighth-grade students and Javanese language teachers at SMP Negeri 1 Jatibarang as research subjects. This study focused on the development of teaching materials in the form of Javanese script comic strips using Javanese script as the main font. The assessment results show that the media product is in the excellent category by material experts with a feasibility score of 98% and media experts with a score of 95%. Meanwhile, the teacher response results produced a feasibility score of 95% and the student response results with a score of 93.75% in the excellent category. These results show that these comic strips can be used effectively as an alternative medium for teaching materials.

Keywords: Javanese Script, Comic Strips, Learning Media

Introduction

The Javanese language is a means of communication within families and communities in the region, serving as a tool for character building and as the

identity of the Javanese people. Javanese people typically use the Javanese language in their daily lives, but it has also spread to various countries as a cultural heritage (Putri & Subrata, 2024). Unfortunately, many young people today do not master the Javanese language, including its script. Therefore, it is necessary to preserve the Javanese language, one of which is through learning Javanese with various local contents (Pratama et al., 2022).

The Javanese language is included as a local content subject (Mulok) from elementary (MI) to high school (SMK) levels, taught in accordance with Central Java Governor Decree No. 423.5/04678 of 2022 concerning the Javanese Language Curriculum. One of the learning outcomes included in the independent Javanese language curriculum for phase D is "students are able to read Javanese script paragraphs to find the explicit and implicit meanings." The purpose of learning to read Javanese script is so that students can understand and interpret the information contained in Javanese script texts.

Regarding the problems of learning Javanese, from the results of observations at SMP Negeri 1 Jatibarang, it is known that students find it most difficult to learn Javanese script. It is often regarded as one of the more difficult and less engaging subjects in Javanese language education today, especially in the context of globalization (Dewi & Subrata, 2022). From the initial observations, students appear to have difficulty reading Javanese script due to the large number of characters, their complex shapes and writing rules, which make it difficult for students to learn. Most students lack proficiency in reading Javanese script because they have difficulty memorizing Javanese characters with their *pairs* and *sandhangan* (Febrianti & Insani, 2023). Therefore, it is not surprising that 87.5% of eighth-grade students at SMP Negeri 1 Jatibarang lack proficiency in reading Javanese script.

In fact, observations also show that the problems faced by students in learning Javanese language material, including Javanese script, are due to their low interest in learning. Interest in learning greatly influences students' mastery of a subject (Joeniarni & Mulyoto, 2022). Therefore, teachers are expected to find solutions so that students can develop an interest in the learning material, thereby increasing their interest in learning.

In addition, problems arising from external factors found at SMP Negeri 1 Jatibarang are related to the lack of creativity in the teaching methods used by teachers. Javanese language teachers still teach using conventional methods, namely lectures and assignments, so that students tend to be less active in participating in classroom learning. In addition, teaching and learning activities at the school are not optimal due to limited facilities and use of learning media, especially for Javanese script material. So far, the learning media most often used in the teaching and learning process in the classroom by teachers is still limited to blackboards and markers. The use of non-digital media that is still used today certainly needs to be innovated by utilizing digital media that can foster students'

enthusiasm for learning. Various problems that arise certainly need effective and efficient solutions so that Javanese script material can be considered a fun and not boring subject for students.

One solution that can be attempted to overcome the problem of learning Javanese script is to use interactive learning media to attract students' attention to learning Javanese script. Learning media serves as a tool that conveys messages or information, facilitating the acquisition of knowledge, skills, and attitudes while stimulating students' desire to learn (Nurhidayati et al., 2023). However, it is essential to ensure that the chosen educational media meets specific criteria to optimize the learning experience. Dewi & Subrata (2022) revealed that inappropriate media can actually cause students' motivation to learn to decline.

The learning media that will be used as a solution for learning Javanese script in this study is in the form of Javanese script comic strips. Comics can be used as a medium for conveying messages in stories that are presented concisely and are easy to digest, using verbal language that helps readers quickly understand the intended message, and as an alternative way to improve Javanese reading skills (Suharti et al., 2020). Based on the research by Azizah et al (2024), one of the most interesting learning media is comic strips because students are more interested in reading reading materials that contain colorful pictures and dialogues than reading textbooks.

In addition, Rosalina et al (2025) argue that colorful visual displays with short stories in comic strips can help students understand the content of the story easily and feel as if they are experiencing real events, thereby strengthening their memory. This is reinforced by the findings of Ramjas et al (2021), who state that the use of comic strips as learning media with concise storytelling and attractive visual displays results in high effectiveness in student learning outcomes. Comic strips are a series of images that contain sequential stories and consist of several panels, usually consisting of 3 to 6 panels or thereabouts (Ipriyanto, 2021).

Yuliandari & Yeni (2020) revealed that the stories in comic strips are usually made concise with several panels, and these comic strips also explain the ideas in their entirety so that the ideas conveyed involve a single focus of discussion. The use of comic strips in learning is considered to help improve reading skills and understanding of the messages contained in stories with visual media that are packaged in an attractive way (Ipriyanto, 2021).

This is in line with Mahendra et al (2021), who revealed that students are more interested in reading picture books because of their attractive visuals with stories that are easy to understand and remember compared to textbooks, which may be more abstract. Therefore, the Javanese script comic strips to be developed in this study are designed based on the conditions of the students by combining several learning contents loaded with character education values, as found in the content of the *kinanthi Serat Wulangreh* song.

The Wulangreh manuscript contains life lessons or moral teachings on how

humans should live a good life in their daily lives (Damairia et al., 2022). *Serat Wulangreh*, written by Sri Susuhunan Pakubuwono IV, is manifested in Javanese literature in the form of *macapat* poetry consisting of 13 *pupuh*, including *Dhandhanggula*, *Kinanthi*, *Gambuh*, *Pangkur*, *Maskumambang*, *Megatruh*, *Durma*, *Wirangrong*, *Pucung*, *Mijil*, *Asmaradhana*, *Sinom*, and *Girisa* (Panani, 2019). One of the *pupuh* found in *Serat Wulangreh*, which is also the second *pupuh* of the *tembang*, is the *kinanthi pupuh*, which consists of 6 *gatra* (lines) with the meter: 8u, 8i, 8a, 8i, 8a, 8i (Wuryantoro et al., 2023). The *kinanthi* song itself tends to be used to describe feelings of happiness, affection, love, and to show exemplary behavior. Moreover, selecting the *kinanthi* song enhances students' understanding of ethical, aesthetic, moral, and courteous value (Sugiarti, 2019) that are needed in today's era. Therefore, the *Serat Wulangreh pupuh kinanthi* is very suitable for educating the millennial generation because it contains character values (Retnowati, 2020).

The Javanese script comic strip media developed in this study is related to Javanese script material containing character values found in the *Serat Wulangreh pupuh kinanthi*, which is designed in accordance with the learning outcomes of the independent curriculum phase D. This Javanese script comic strip media *tembang kinanthi* contains moral messages or good life advice to improve the morality and good character of students at SMP Negeri 1 Jatibarang. The reason the researcher chose the *Kinanthi poem* is because it contains character values that are suitable for students, such as discipline, responsibility, social skills, and spirituality. This is in line with Panani's (2019) finding that a person's character and morals greatly influence their life, so that a good personality will bring benefits to oneself. Therefore, instilling character education in students can provide guidance on the direction of life for students.

Research into comic media development has been conducted by several researchers with varying results. Yuliandari & Yeni (2020) and Febriyanti et al (2021) have created comic strips for elementary school students, as has Rachman (2021), who created comic strips featuring Cirebon mask characters. Hidayattulloh & Sukoyo (2021) also developed a digital *webtoon* comic based on the *Serat Tripama* text, Lestari et al (2022) created educational comic media with Javanese cultural content, while Fradani et al (2022) created digital comic media with a *self-directed learning* model.

Regarding the development of comics as a medium for learning Javanese script, Oktaviani et al (2022) created a Javanese script comic, and Apsari & Kristiana (2023) created a digital comic entitled "Ngerteni Aksara Jawa" for elementary school students. This research focuses on the development of digital comic media by discussing various materials related to *Serat Tripama*, Javanese culture, and anecdotal texts. However, there has been no research on the development of comic strips using Javanese script. Therefore, this research was conducted to complement previous research by creating a Javanese script comic strip containing the contents of *Serat Wulangreh pupuh kinanthi*.

Further research related to the development of *Serat Wulangreh* media has been conducted by several researchers, such as Sugiarti (2019), who created a *think-pair-and-share* cooperative learning model using the *piwulang* text from *Serat Wulangreh*. Ardiyana et al (2019) also created a picture storybook based on *the Serat Wulangreh pupuh pangkur*. Similarly, Dewi et al (2023) created an interactive learning application for *Serat Wulangreh pupuh gambuh*.

These studies focused more on developing media for elementary school students on the material of *Serat Wulangreh pupuh pangkur* and *gambuh*. However, there has never been any development of *Serat Wulangreh* material in the form of comic strips. Therefore, the researcher complemented previous studies that did not discuss *Serat Wulangreh pupuh kinanthi* learning media by using Javanese script comic strips.

The novelty of this research lies in the Javanese script comic strip learning medium, which offers a different reading experience because it uses Javanese script as the main font. By reading these comics, readers not only enjoy the story, but also learn about Javanese script and the character values contained in the content of *Serat Wulangreh tembang Kinanthi*. In addition, Javanese script comic strips can be an effective educational medium for introducing Javanese script to school students, university students, and the general public.

Interesting stories and distinctive visuals can make the learning process enjoyable. This medium has never been used in Javanese script lessons in the eighth grade at SMP Negeri 1 Jatibarang to teach Javanese script. Unfortunately, this study only developed a prototype of the Javanese script comic strip without testing it directly in the classroom due to the researcher's time constraints. This medium was designed with the aim of improving Javanese script reading skills and helping students to more easily understand the content of *Serat Wulangreh pupuh kinanthi*.

This study aims to 1) describe the findings from the needs analysis for developing Javanese script comic strip learning media at SMP Negeri 1 Jatibarang for Grade VIII, 2) develop a prototype of Javanese script comic strip media containing the content of *Serat Wulangreh pupuh kinanthi*, and 3) analyze the results of expert validation and student responses to the developed comic strip media. The results of this analysis can be used as a reference in selecting learning media and developing prototypes that have been adapted to Javanese language subjects according to student needs. Therefore, the feasibility results of expert validation of the media and materials are needed so that the development of this learning media can be utilized in the classroom learning process.

Methods

This study uses a type of *research and development* (R&D) used to produce products and test the effectiveness of Javanese script comic strips. The research and development design uses Branch's (2009) ADDIE (*Analysis, Design, Development, Implementation & Evaluation*) model. This research focuses on

developing a prototype of Javanese script learning media in the form of comic strips for junior high school students. However, the research does not include testing the media in learning due to time constraints. Therefore, this stage was simplified according to the research needs into three stages.

First, the stage of analyzing student needs, where the data was obtained through field observations conducted by distributing student needs questionnaires and analyzing the material through interviews with Javanese language teachers. Second, the design stage, which was the process of conceptualizing and designing the Javanese script comic strip product. Third, the development stage, which involved realizing the product design into a tangible product. The research procedure in more detail can be seen in Chart 1.

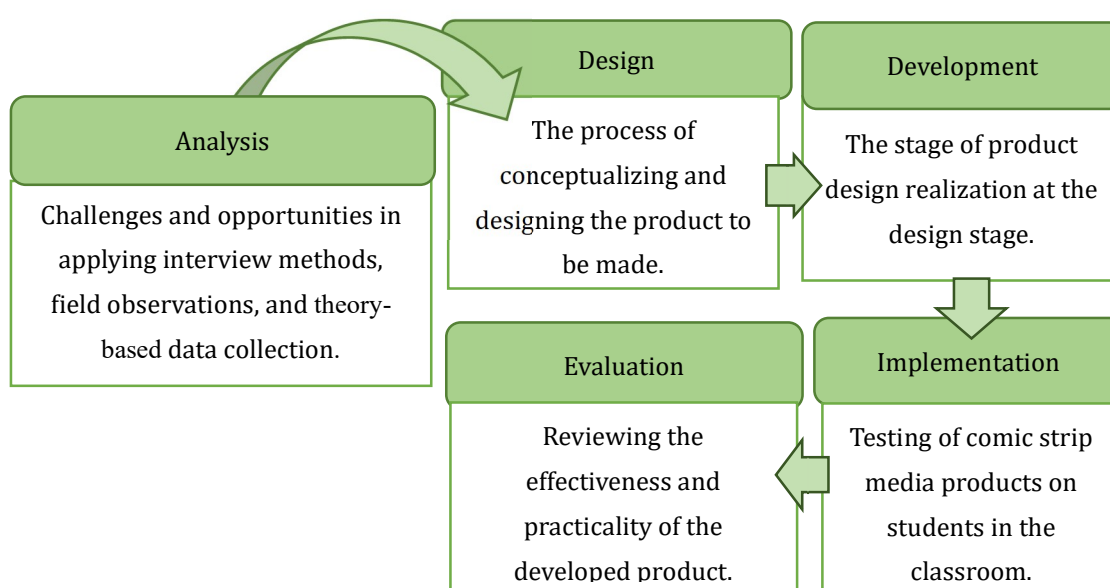


Figure 1/ Stages of the ADDIE development model

This study was conducted at SMP Negeri 1 Jatibarang. The data sources for this study were two Javanese language teachers and 32 students from class VIII F, selected using non-proportional stratified random sampling at SMP Negeri 1 Jatibarang by distributing research questionnaires, as well as subject matter experts and media experts. This study collected data using observation, interviews, and questionnaires. The observation technique was carried out at SMP Negeri 1 Jatibarang by directly observing the application of learning about Javanese script material as a way to identify problems at the research site from May 25 to 31, 2024.

Interviews were conducted with Javanese language teachers at SMP Negeri 1 Jatibarang to identify obstacles in the implementation and needs related to Javanese script material in schools. On the other hand, questionnaires were used to obtain product validation data from media and material experts, as well as response questionnaires from teachers and students regarding the Javanese script

comic strip media that had been developed, which was conducted from January 17 to January 25, 2025.

The data analysis techniques used in this study were quantitative and descriptive qualitative data analysis. Quantitative data were obtained from product assessments by media and material validators and responses to product use by teachers and students. Descriptive qualitative data can be seen in the critiques and suggestions or input provided by expert validators (Tanuwijaya et al., 2023).

Qualitative data was also obtained from the product development needs questionnaire. Data related to product feasibility was obtained using a Likert scale with a rating scale of 1-5, ranging from poor to excellent. Product feasibility conclusions can be calculated using the formula developed by Kery et al (2024), which is then matched to the categorization table as shown in Table 1.

$$V = \frac{TSEV}{S-max} \times 100\%$$

Explanation:

V = Expert validation (percentage value)

TSEV = Total empirical score sought

S-max = Total maximum expected score

Table 1/ Achievement percentage based on a 5-point rating scale

N o	Achievement Percentage (%)	Feasibility	Description
1	0.00 - 20.00	Very unsuitable	Revision
2.	21.00 - 40.00	Inadequate	Revision
3.	41.00 - 60.00	Sufficiently suitable	Revision
4.	61.00 - 80.00	Good	No revision
5	81.00 - 100.00	Very good	No revision

(Source: Kery et al., 2024).

Results and Discussion

This research on comic strip product development was conducted using the ADDIE method, which includes Analysis, Design, Development, Implementation, and Evaluation. However, the research did not progress to the Implementation and Evaluation stages of the product. The first research objective, which focused on analyzing the needs of students and teachers, was achieved during the Analysis phase. The second research objective, concerning the development of the product prototype, was established during the Design phase. The third research objective, related to the results of product validation, was derived from the Development

phase. Below are the results from the research phases that have been completed:

Analysis of Teachers' and Students' Needs for Learning Media in the Form of Javanese Script Comic Strips from *Serat Wulangreh Pupuh Kinanthi*

The results of the research on the development of Javanese script comic strip media can be described as follows. An analysis of the need for Javanese language learning media was conducted at SMP Negeri 1 Jatibarang, namely in class VIII F with 32 students and 2 Javanese language teachers. Data collection was carried out through observation, interviews, and questionnaires in May 2024 and January 2025. To strengthen the research data, the researcher conducted direct observations and was intensively involved in the learning activities. Then, various learning activities and processes were documented to reinforce the previous data.

Analysis of the results of observations, interviews, and student needs questionnaires showed that classroom learning still uses conventional teaching methods with learning media that only use textbooks and worksheets, resulting in low student interest in learning. Given this situation, there is a need to develop fun, innovative, and creative learning media to increase student interest in learning. The results of the offline student needs questionnaire revealed data on the difficulties encountered in learning Javanese script.

The questionnaire, which was completed by 32 students, showed that 87.5% of students in class VIII F were not proficient in reading Javanese script. Students stated that they had difficulty reading Javanese script because they found it difficult to memorize the Javanese characters and their pairs and combinations. This is similar to Surya et al (2023), who found that students' interest in learning was low due to a lack of learning media and the continued use of conventional learning methods, as well as students' difficulty in memorizing Javanese script *sandhangan*. Therefore, students need interesting learning media to increase their interest and facilitate the learning process.

Through interviews with Javanese language teachers, it was found that the difficulties encountered stemmed from the learning process, which still used conventional methods, namely lectures and assignments, causing students to feel bored and uninterested in the learning process in the classroom. In addition, the available facilities are inadequate, making it difficult for teachers to teach, as they can only use teacher's manuals and student books (textbooks) without the help of new and interesting learning media (Nurwanti & Bahtiar, 2024).

In response to this, teachers need alternative learning media that can attract students' interest in the classroom learning process, such as comic strips. Comic strips tend to be more effective in creating engagement and a more visual understanding of concepts, while conventional methods are more suitable for delivering broad and structured information, but can be less interesting. This is in line with the findings of Salsabila et al (2024), which reveal that the use of comics in learning is expected to overcome students' boredom with conventional learning

methods, as well as increase students' interest and understanding of the subject matter.

The development of Javanese script comic strip learning media is expected to improve students' Javanese script reading skills and mastery of the material. In addition, the development of Javanese script comic strip learning media is expected to apply character education taken from *Serat Wulangreh pupuh tembang kinanthi* in order to form a good personality in everyday life. Therefore, one way to form good character is through learning media such as comic strips. Comic strips use visuals and storylines to present character values in an interesting way so that students can more easily understand and remember the information or messages contained therein.

This is reinforced by the findings of Faradiba & Budiningsih (2021), who state that the formation of attitudes and character is one of the most important things to improve the quality of learning with the help of interesting and innovative learning media such as character-based comic media. In addition, Irman et al (2023) argue that the use of comic media is very effective in learning that influences the improvement of students' character and responsibility, thereby forming a strong character that is ready to face future challenges. Through the use of this media, students can learn flexibly and enjoyably and can increase their independence in learning.

Prototype of Learning Media: Javanese Script Comic Strip *Serat Wulangreh Pupuh Kinanthi*

The development of Javanese script comic strip learning media involves a series of steps, including: (1) needs analysis; (2) compiling learning materials and outcomes; and (3) *storyboard* development. The first stage is needs analysis, which is the initial step in developing Javanese script comic strip products. Based on observations at SMP Negeri 1 Jatibarang, it was found that students faced problems in learning Javanese language material. Therefore, the researcher distributed a needs questionnaire to Javanese language teachers and eighth-grade students directly at the school.

The second stage was to compile learning materials and outcomes. The materials were selected during interviews with Javanese language teachers at SMP Negeri 1 Jatibarang. The materials selected for use in this learning medium were eighth-grade materials, namely Javanese script related to *Serat Wulangreh pupuh tembang kinanthi* concerning character education contained in the song. This media is packaged in an attractive way with Javanese script and uses everyday language so that students can easily understand it. The learning outcome of Javanese language " " for eighth grade is "students are able to read Javanese script paragraphs to find the explicit and implicit meanings." The material is collaborated with the character values in *the kinanthi song* and produces a learning media, namely a Javanese script comic strip that contains character education.



Figure 2/ Storyboard Process

The final stage in media product development is the design *of a comic storyboard*. The Javanese script comic strip learning media is designed to increase students' interest in learning the Javanese language, especially Javanese script material. The comic strip media is made as attractive as possible to interest students and facilitate the learning process in the classroom. This is in line with the opinion of Rohani & Anas (2022) that media should be designed as attractively as possible to grab students' attention, and that the design of comic media makes students more enthusiastic in the learning process so that they do not get bored while learning.

Table 2/ Javanese Script Comic Strip Prototype

Aspect	Description
Comic Title	Si Kani
Theme and Moral	Religious
Characters	Kani, Rama, Danang, Teacher Nunung
Plot	Forward
Setting	At Jatibarang 1 Public Middle School
	On the road to Kani's house Time (morning and afternoon)
Language	Javanese language, ngoko and krama varieties
Presentation	Javanese script dialogue
Color	Mixed

The characters in Javanese comic strips are illustrated in accordance with the daily lives of students to make it easier for them to imagine and understand the content of each image. Alviolita & Huda (2019) revealed that the selection of image forms is tailored to the learning needs of students so that students can accept the images well, the suitability of the images with the material, and the suitability of the images with real life. Through these images, teachers can stimulate students' imaginations with their own thoughts. Therefore, characters were created to make it easier to understand the content of the story. The main character in this comic is named Kani, with his friends Rama and Danang. Meanwhile, the supporting character in this comic is Mrs. Nunung, who plays the role of a Javanese language teacher. This comic strip contains moral messages about character education contained in *Serat Wulangreh pupuh tembang kinanthi* in order to educate students' characters.

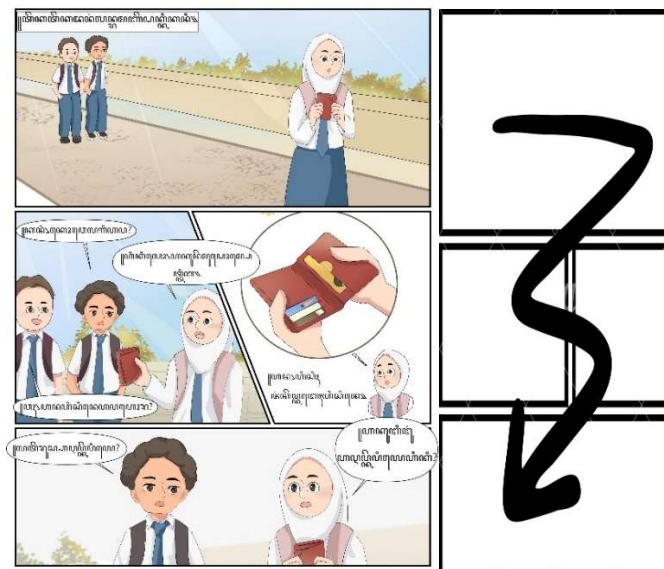


Figure 3/ Comic layout

The panels consist of 3 to 6 panels that are told sequentially according to the needs of the story. The reading direction of these Javanese comic strips is from right to left and from top to bottom (vertical).



Figure 4/ Color selection

Color selection plays a very important role in bringing an illustrated character

and visual character in comics to life. The researchers chose to use a mixture of bright colors, pastel colors, and gradient colors that would give an attractive impression and clarify the visuals, making the story more lively and easier to convey the message in the story. This is in line with the opinion of Apsari & Kristiana (2023), who explain that the selection of striking colors aims to convey a communication message containing Javanese characters so that it can be easily learned.

The Suitability of Javanese Script Comic Strips Containing Serat Wulangreh Pupuh Kinanthi

The assessment instrument in this study was a questionnaire or validation sheet that was submitted to subject matter experts and media experts as a means of determining the feasibility of developing Javanese script comic strip learning media. The assessment instrument was also shown to teachers and students to gauge their response after using it.

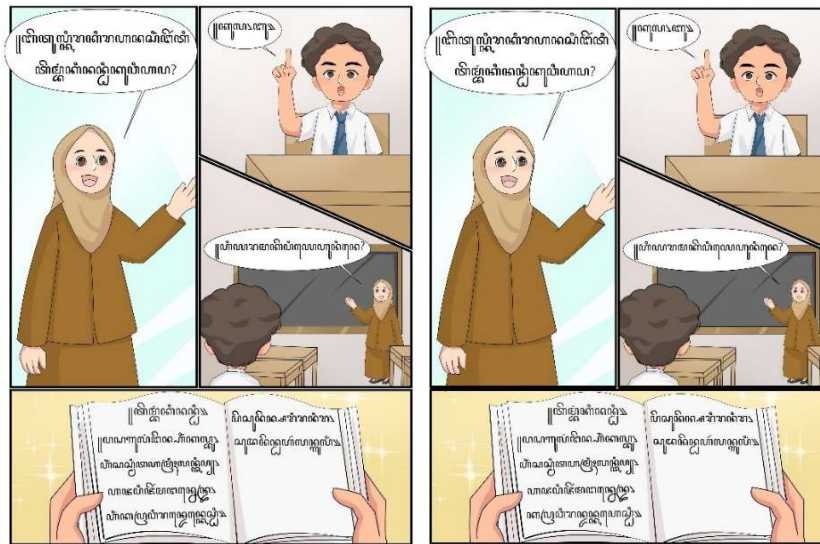
Table 3/ Validation Test Results

VALIDATOR	SUBJECT MATTER EXPERT	MEDIA EXPERT
PERCENTAGE	98	95%
CRITERIA	Very good	Very good

The validation test results from subject matter expert Mr. Dandung Adityo Argo Prasetyo, S.S., M.Hum., a lecturer at Semarang State University, show that the development of Javanese script comic strips received an average score of 49 out of 50, with a percentage of 98% and a rating of "very good." The subject matter expert assessed the Javanese script comic strip media in terms of content and language using 10 indicators. There were 5 indicators for content and 5 indicators for language. For content, the indicator of suitability with the content of *Serat Wulangreh tembang kinanthi* scored 4. The indicator of comic material presented that is relevant to everyday life scored 5.

The next indicator regarding the content of the learning media that can help students understand the material scored 5. The indicator of conformity with the school curriculum scored 5. The last indicator of content, the indicator of conformity with learning outcomes, scored 5. In terms of language, the indicator of sentence structure in the media being effective for conveying information scored 5. The indicator of communicative language use scored 5. The indicator of conformity with Javanese script writing rules scored 5. Furthermore, the indicator of simple and easy-to-understand language use scored 5, and the indicator of language use that does not contain double meanings and ambiguities scored 5. The results of the assessment show that Javanese script comic learning media are suitable for use. However, there is a revision in the content aspect regarding the writing of

sentences in the *kinanthi* song from "*ing kaprawiran den kesthi*" to "*kaprawiran den kaesthi*". Although there are aspects that need to be revised, this learning media is suitable for use after improvements are made in accordance with the suggestions of the validator experts.



Before Revision

After Revision

Figure 5/ Design Display After and Before Revision

The assessment given by media expert validator Mrs. Rahma Ari Widiastuti, S.Pd., M.A., a lecturer at Semarang State University, scored 76 out of 80 with a percentage of 95%. Based on this assessment, the Javanese script comic strip learning media is classified as excellent. There are four aspects, namely appearance, media content, language, and practicality in the use of media, with 16 indicators. There are 8 indicators in the appearance aspect, 2 indicators in the media content aspect, 1 indicator in the language aspect, and 5 indicators in the practicality aspect in the use of media.

In the appearance aspect, the writing display indicator includes the writing of the title, font size, use of words, and clarity of writing, with a score of 20. Meanwhile, the image display indicator includes image clarity, color display, image suitability with writing, and illustration display, with an average score of 20. In the media content aspect, the comic material suitability indicator scored 5. The next indicator, suitability with learning outcomes, received a score of 5.

In terms of language, the indicator of language used that is easy to understand received a score of 4. In terms of practicality in media use, the indicator of learning media that is able to attract and focus students' attention received a score of 4. The indicator of media that builds effective communication received a score of 4. The indicator of comic media providing opportunities for independent learning received a score of 5. The indicator of increased student retention scored 5 and the indicator of increased interest and motivation to learn scored 4. Based on these

assessments, it can be seen that Javanese script comic strip learning media is categorized as suitable for use.

Teacher and Student Response Questionnaire

A questionnaire regarding the Javanese script comic strip learning media was given to Javanese language teachers and eighth grade students. The questionnaire was distributed by 32 eighth grade students at SMP Negeri 1 Jatibarang and two Javanese language teachers. The results of the teacher and student response questionnaire are shown in Table 4.

Table 4/ Teacher and Student Response Questionnaire Results

RESPONSE QUESTIONNAIRE	TEACHERS	STUDENTS
PERCENTAGE	95	93.75
CRITERIA	Very good	Very good

Based on the results of the assessment of the responses of two teachers to the Javanese script comic strip media, an average score of 95 out of 100 was obtained, representing a percentage of 95% with a criterion of very good. There are 10 indicators consisting of four aspects of media assessment, namely appearance, media content, language, and practicality in media use. The appearance aspect has 3 indicators, the media content aspect has 2 indicators, the language aspect has 1 indicator, and the practicality of media use aspect has 4 indicators.

In the appearance aspect of the Javanese script comic strip, the assessment of the attractiveness of the comic received a score of 5 and 5, while the appearance aspect of the clarity of the writing received a score of 5 and 4, and the presentation of the characters received a score of 5 and 5. In the content aspect, the indicator of the suitability of the comic material with the learning outcomes received a score of 5 and 5, while the other indicator regarding the suitability of the material with the learning objectives received a score of 5 and 5.

In terms of language, the indicators of grammar and sentence structure received scores of 4 and 4. Furthermore, in terms of the practicality of media use, the indicator of media effectiveness in increasing motivation received a score of 5 and 5, while the indicator of media flexibility received a score of 4 and 5. The indicator of ease of understanding the material received a score of 5 and 5, and the final indicator of adding to knowledge received a score of 5 and 5.

Meanwhile, the response questionnaire completed by 32 students in class VIII F obtained an average score of 1,500 out of 1,600, representing a percentage of 93.75% with a very good rating. There are four aspects with 10 indicators, starting from the appearance aspect which has 2 indicators, the media content aspect has 2 indicators, the language aspect has 2 indicators, and the practicality of media use aspect has 4 indicators. In the appearance aspect, the indicators of the

appropriateness of comic expressions and the attractiveness of comic designs obtained a score of 300. The media content aspect regarding the ease of presenting material in an orderly and easy-to-understand manner obtained a score of 301. The language aspect obtained a score of 299, while the practicality aspect in the use of media obtained a score of 600.

A percentage of 95% of teachers' responses and a percentage of 93.75% of students' responses concluded that Javanese script comic strip media is suitable for use as an alternative medium for learning Javanese script and *Serat Wulangreh pupuh tembang kinanthi*. This learning medium can also be used to improve Javanese script reading skills. However, some students still experience difficulties in reading comic. These difficulties include some students who still have trouble distinguishing between the use of *sandhangan* and its pair.

This is similar to Febriani & Insani (2024), where many students still make mistakes, such as having difficulty distinguishing between Javanese letters that are almost similar and having difficulty distinguishing the use of *sandhangan* because students are not well-trained in reading and writing Javanese letters.

Conclusion

First, the results of the analysis of the student needs questionnaire conducted at SMP Negeri 1 Jatibarang show that the school community, especially students in class VIII F, need the development of Javanese script comic strip learning media about the moral messages in *Serat Wulangreh tembang Kinanthi* as a medium for character education. The development of Javanese script comic strip learning media can be used as a new learning medium in Javanese script material to improve reading skills.

The content of this comic strip learning media is about the moral messages contained in *the Kinanthi song* to improve character education for students at SMP Negeri 1 Jatibarang. This comic strip can help instill character education in students, which can motivate them to behave well in their daily lives. In addition, Javanese script comic strip learning media can be an effective educational medium to introduce Javanese script to school students, university students, and the general public. The dominant use of Javanese script gives it a strong identity and distinguishes it from other comics in general. By reading this comic, readers not only enjoy the story but also learn about Javanese script with attractive visuals.

Second, the suitability of the Javanese script comic strip "Si Kani" as a learning medium was rated as highly suitable, with a score of 98% from expert lecturers in the subject matter and 95% from lecturers who are experts in media, placing it in the excellent category.

Third, the assessment of the Javanese language teacher response questionnaire to the Javanese script comic strip product received a score of 95% in the excellent category. Meanwhile, the student response to the product received a score of 93.75% in the excellent category. These excellent scores indicate that the

Javanese script comic strip product "Si Kani" is very suitable for use in the classroom learning process. However, this study only developed a prototype of the Javanese script comic strip without testing it. Although the prototype of the Javanese script comic strip cannot be tested directly in learning, the results of this study show that the visual design of the Javanese script comic strip was developed with an attractive appearance to foster students' motivation and interest in learning. In addition, the comic story was made to be easy to understand and remember compared to textbooks, which may be more abstract.

Interesting stories and distinctive visuals can make the learning process more enjoyable. Therefore, further research is needed so that learning media can be modified by taking into account the needs and characteristics of students and can expand the scope of the media platform.

References

- Alviolita, N. W., & Huda, M. (2019). Pop-Up Books in Storytelling Learning. *Indonesian Language Education Journal*, 7(1), 49–57.
- Apsari, W. R., & Kristiana, N. (2023). Digital Comic "Ngerteni Aksara Jawa" as an Effort to Introduce Javanese Script to 9-Year-Old Students at SDN Anggaswangi II. *Barik Journal*, 4(2), 214–226.
- Ardiyana, V. P., Nugroho, Y. E., & Mujimin. (2019). Development of Picture Story Books Based on Serat Wulangreh Pupuh Pangkur for Javanese Language Learning in Junior High Schools in Semarang City. *Piwulang: Journal of Javanese Language Education*, 7(2), 28–33. <https://doi.org/10.15294/piwulang.v7i2.29601>
- Azizah, N., S. Anshori, D., & Abidin, Y. (2024). The Use of Teaching Materials for Writing Explanatory Texts Using Clustering Techniques Assisted by Digital Comic Strips. *IdeBahasa*, 6(1), 111–119. <https://doi.org/10.37296/idebahasa.v6i1.188>
- Branch, R.M. (2009). Instructional Design: The ADDIE Approach. Boston, MA: Springer US
- Damairia, D., Bhakti, C. P., & Iriastuti, M. E. (2022). Identification of Virtues in Serat Wulangreh as a Form of Developing School Counselors' Personality Competencies. *Journal of Education and Counseling*, 4(3), 2423–2427.
- Dewi, S. M., Mujimin, & Widodo. (2023). Interactive Learning Media Serat Wulangreh Pupuh Gambuh in Ngapak Dialect. *Piwulang: Journal of Javanese Language Education*, 11(2), 181–191.
- Dewi, S. M., & Subrata, H. (2022). Development of Flora and Fauna Card Learning Media for Javanese Script Reading Skills for Third Grade Elementary School Students. *PGSD*, 10(6), 1379–1389.
- Faradiba, D. G., & Budiningsih, C. A. (2021). Development of comic media based on social care character education in thematic-integrative learning. *Journal of Educational Technology Innovation*, 7(2), 196–204.

- <https://doi.org/10.21831/jitp.v7i2.24758>
- Febriani, N. W. A., & Insani, N. H. (2024). The Effectiveness of the CIRC Model Using Javanese Scrabble Media on Javanese Letter Writing Outcomes. *Piwulang: Javanese Language Education Journal*, 12(2), 141–153.
- Febrianti, R., & Insani, N. H. (2023). Development of Dhek Bung (Bedhek Tembung) Javanese Script Learning Media Based on a Website at SMP Muhammadiyah III Ngadirejo. *PRASI: Journal of Language, Arts, and Teaching*, 18(No. 02), 81–95.
- Febriyanti, D. D., Parmiti, D. P., & Sudarma, I. K. (2021). Comic Strip Media in Natural Sciences Subjects for Grade V Elementary School. *Indonesian Journal of Instruction*, 2(1), 29–37. <https://doi.org/10.23887/iji.v2i1.31316>
- Furwana, D., Muin, F. R., Zainuddin, A. A., & Mulyani, A. G. (2024). Unlocking the Potential: Exploring the Impact of Online Assessment in English Language Teaching. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 12(1), 653-662.
- Fradani, A. C., Stevani, F., & Kurniawan, A. (2022). Experimentation of the Self-Direct Learning Model with Digital Comic-Based Learning Media. *Perspectives on Education and Teaching*, 13(1), 80–87. [https://doi.org/10.25299/perspektif.2022.vol13\(1\).10022](https://doi.org/10.25299/perspektif.2022.vol13(1).10022)
- Husnaini, H. (2022). Development of Self Esteem-Oriented Micro Teaching Materials for IAIN Palopo English Education Students. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 10(1), 538-560.
- Hidayattulloh, V. K., & Sukoyo, J. (2021). Serat Tripama Comic: Development of Digital Webtoon Comic-Based Learning Media. *Piwulang: Journal of Javanese Language Education*, 9(2), 220–228. <https://doi.org/10.15294/piwulang.v9i2.49828>
- Ipriyanto, I. (2021). Efforts to Increase Students' Interest in Reading Using Comic Strips. *Pedagogy: Journal of Education and Learning*, 1(1), 24–29. <https://doi.org/10.56393/pedagogi.v1i1.131>
- Irman, R. F., Yuliasrin, A., & Vebrianto, R. (2023). The Effect of Social Media-Based Online Comics for Anti-Drug Socialization on Elementary School Students' Character. *Muallimuna: Madrasah Ibtidaiyah Journal*, 8(2), 42–51.
- Joeniarni, L., & Mulyoto, M. (2022). Application of the Jigsaw Learning Model with Script Cards to Improve Interest and Learning Outcomes in Javanese Script Writing Skills. *Wiyata Dharma: Journal of Educational Research and Evaluation*, 10(1), 72–80. <https://doi.org/10.30738/wd.v10i1.3646>
- Kery, M. J., Retno, R. S., & Kusumawati, N. (2024). Development of Strip Story Media in Science Subjects to Improve Learning Motivation of Fifth Grade Elementary School Students. *Proceedings of the Basic Scientific Conference*, 5, 1177–1184.
- Lestari, E. Y., Shinta, D., Susilo, J., & Khoirulloh, K. (2022). The Effectiveness of Using Javanese Culture-Based Educational Comics to Improve Reading

- Comprehension Skills in Elementary School Students. *Jurnal Basicedu*, 6(2), 2815–2822. <https://doi.org/10.31004/basicedu.v6i2.2503>
- Mahendra, E. R., Siantoro, G., & Pramono, M. (2021). Development of Educational Comics as a Learning Medium and Its Effect on Student Learning Motivation. *Jurnal Education and Development*, 9(1), 279–284.
- Nurhidayati, V., Ramadani, F., Melisa, F., & Putri, D. A. E. (2023). The Application of Learning Media on Student Motivation. *Bina Gogik*, 10(2), 99–106.
- Nurwanti, T., & Bahtiar, R. S. (2024). Literature Review on the Benefits of Poster Learning Media on the Theme "Things Around Me" to Increase the Creativity of Third Grade Students at SDN Dukuh Kupang 5 Surabaya. *Adi Widya: Journal of Primary Education*, 9(1), 96–104. <https://doi.org/10.25078/aw.v9i1.2803>
- Oktaviani, K., Untari, M. F. A., & Wardana, M. Y. S. (2022). Development of Javanese Script Comic Media for Fifth Grade Elementary School Students. *Dwijaloka Journal of Primary & Secondary Education*, 3(4), 408–416.
- Panani, S. Y. P. (2019). Serat Wulang Reh: Teachings on Moral Excellence in Building a Noble Character. *Journal of Philosophy*, 29(2), 275–299.
- Pratama, P. M., Efendi, A. N., Rahmawati, F., Sholihin, M. D. I., & Susanto, Moh. A. (2022). Tracking Javanese Cultural Heritage through Augmented Reality and its Implications in Indonesian Language for Foreign Speakers (BIPA) Learning. In P. M. Pratama, A. N. Efendi, F. Rahmawati, M. D. I. Sholihin, & Moh. A. Susanto (Eds.), *Proceedings of the International Conference on Industrial Engineering and Operations Management* (pp. 2798–2809). IEOM Society International. <https://doi.org/10.46254/AP03.20220482>
- Putri, H. A., & Subrata, H. (2024). Development of Cakap Aksara Jawa (CAKRA) Media Assisted by the Genially Application for Fourth Grade Elementary School Students' Javanese Script Reading Skills. *JPGSD*, 12(04), 541–552.
- Rachman, V. S. (2021). Designing Digital Comic Strips with a Millennial Style Using Cirebon Mask Characters. *BHAGIRUPA, Journal of Visual Communication Design*, 1(1), 22–30.
- Ramjas, R., Syahrudin, H., & Firmansyah, A. (2021). The Effectiveness of Using Comic Strips on the Learning Outcomes of High School Students in History at Muhammadiyah 1 Pontianak. *Khatulistiwa Journal of Education and Learning*, 10(12), 1–9.
- Retnowati, D. (2020). The Noble Values of Serat Wulangreh Pupuh Gambuh in Building the Character of the Millennial Generation. *Indonesian Journal of Educational Science (IJES)*, 3(1), 01–11. <https://doi.org/10.31605/ijes.v3i1.804>
- Rohani, A., & Anas, N. (2022). Development of Comic Media Using the Comic Page Creator Application to Improve the Reading Skills of Second Grade Elementary School Students. *Jurnal Cakrawala Pendas*, 8(4), 1287–1295. <https://doi.org/10.31949/jcp.v8i4.3134>
- Rosalina, A., Aka, K. A., & Handayani, A. D. (2025). E-Comic Strip Media in Narrative

- Text Material for Students. *Proceedings of SEMDIKJAR (National Seminar on Education and Learning)*, 8, 184–190.
- Salsabila, A., Purnomo, H., & Kurniawati, W. (2024). Exploration of the Use of Comic Learning Media in Improving the Literacy of Grade 3 Students at Krapyak State Elementary School Wetan. *Adijaya Multidisciplinary Journal*, 02(03), 325–333.
- Sugiarti, S. (2019). Improving Reading Activity and Skills in Piwulang Serat Wulangreh Texts Using the Think Pair and Share Cooperative Learning Model in Grade VIII C Students at SMP Negeri 1 Banyudono. *JUPE: Jurnal Pendidikan Mandala*, 4(5), 344–353. <https://doi.org/10.58258/jupe.v4i5.1054>
- Suharti, Rusmawati, R. D., & Nurjati, N. (2020). Development of Javanese Alphabet Digital Comics in Javanese Language Subjects for Grade VII Students at SMP Negeri 29 Surabaya. *Tafhim Al-'Ilmi: Journal of Islamic Education and Thought*, 14(1), 154–178.
- Surya, N. F., Wenda, D. D. N., & Primasatya, N. (2023). Development of Paku Saraja Learning Media on Javanese Script Material for Fourth Grade Elementary School Students. *Jurnal Muara Pendidikan*, 8(1), 57–66. <https://doi.org/10.52060/mp.v8i1.1185>
- Tanuwijaya, C. A., Airlanda, G. S., & Radia, E. H. (2023). DIA RAJA (Audio Visual Javanese Script) Media in Javanese Language Lessons in Elementary Schools. *Jurnal Educatio*, 9, 2186–2193.
- Wuryantoro, A., Ambarwati, R., & Arifin, S. (2023). Character Education Values in Tembang Kinanthi, Sinom, and Girisa in Serat Wulangreh. *Kalam Cendekia: Journal of Education*, 11(3), 921–927. <https://doi.org/10.20961/jkc.v11i3.80621>
- Yuliandari, S., & Yeni, F. (2020). Development of Comic Strip Media as a Learning Medium Containing Character Values for Lower Grade Elementary School Students. *Inovtech*, 02(01), 1–10.