



## Karawa Media (Karambol Aksara Jawa) Assisted by Reading Cards to Improve Reading Skills in Nglegena Javanese Script

Kailifa Zakia Azzahra<sup>1\*</sup>, Sukardi<sup>2</sup> 

<sup>1,2</sup> Pendidikan Guru Sekolah Dasar, Universitas Negeri Semarang, Semarang, Indonesia

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### ABSTRAK

Muatan pelajaran Bahasa Jawa masih menjadi mata pelajaran yang membosankan, ditambah lagi metode guru untuk menyampaikan materi dengan metode ceramah. Hal ini berdampak terhadap hasil belajar siswa. Penelitian ini bertujuan untuk menciptakan media Karawa (Karambol Aksara Jawa) pada muatan pembelajaran bahasa Jawa siswa kelas III SD untuk meningkatkan keterampilan membaca aksara Jawa Nglegena. Penelitian ini merupakan penelitian pengembangan dengan menggunakan model ADDIE. Subjek penelitian ini yaitu siswa kelas III sebanyak 32 siswa, guru kelas III, dan tim ahli (media dan materi). Metode pengumpulan data menggunakan observasi, tes, kuisioner, dan wawancara. Teknik analisis data menggunakan deskriptif kuantitatif, deskriptif kualitatif, dan statistik inferensial. Hasil penelitian menunjukkan bahwa uji coba ahli materi, uji coba ahli media, uji coba kelompok kecil dan uji coba guru kelas dengan kategori sangat layak. Hasil uji efektivitas dengan uji t-test berpasangan menunjukkan bahwa hasil pre-test dan post-test sama-sama memiliki peningkatan, sehingga dapat disimpulkan bahwa ada perbedaan signifikan antara hasil kelompok besar dan kelompok kecil. Oleh karena itu, media Karawa pada materi aksara Jawa Nglegena sangat efektif, efisien, dan sangat layak digunakan dalam proses pendidikan karena dapat meningkatkan keterampilan membaca aksara Jawa Nglegena siswa kelas III SD. Implikasi penelitian ini yaitu dapat membantu guru dalam penyampaian materi aksara Jawa Nglegena muatan pembelajaran Bahasa Jawa Kelas III SD.

### ABSTRACT

The content of Javanese lessons still needs to be more exciting, plus the teacher's method of delivering the material is using the lecture method. This has an impact on student learning outcomes. This research aims to create Karawa media (Karambol Aksara Jawa) for the content of Javanese language learning for class III elementary school students to improve their reading skills in the Javanese Nglegena script. This research is development research using the ADDIE model. The subjects of this research were 32 class III students, class III teachers, and a team of experts (media and materials). Data collection methods use observation, tests, questionnaires and interviews. Data analysis techniques use quantitative descriptive, qualitative descriptive and inferential statistics. The research results showed that the material expert trial, media expert trial, small group trial and class teacher trial were feasible. The results of the effectiveness test using the paired t-test show that the results of the pre-test and post-test both have an increase, so it can be concluded that there is a significant difference between the results of the large and small groups. Therefore, Karawa media using Javanese Nglegena script material is very effective, efficient, and suitable for use in the educational process because it can improve the reading skills of Javanese Nglegena script for third-grade elementary school students. This research implies that it can help teachers deliver Javanese Nglegena script material for Javanese language learning content for Class III Elementary School.

### 1. INTRODUCTION

Javanese is a language used as a means of communicating in the daily life activities of Javanese people. Not only as a means of communication, Javanese is also a form of identity and pride for the Javanese ethnic group. Javanese is one of the languages with the largest number of users compared to other regional languages (Adelia Firmandasari et al., 2020; Latifah, 2019). One way that can be used to preserve the

Javanese language is through education. Education is a means of developing potential and efforts to improve the quality of human resources (Amania et al., 2021; Eni et al., 2020). Javanese language learning is a mandatory local content subject to be taught in elementary schools. Learning Javanese has four aspects of language skills, namely listening, speaking, reading, and writing skills. Of the four aspects of language skills, reading skills are skills that have a high level and are complex (Ariani, 2020). Javanese is a local content lesson found at the elementary/SDLB, SMP, SMPLB, MTS, SMA/MA/SMK education levels.

Local content is a topic that includes the learning process and local potential of the region in the educational unit (Lestari et al., 2021; Prayoga et al., 2019). Javanese language learning begins in elementary school, in elementary school Javanese language learning takes place from class I to class VI (Naziroh et al., 2021). Local content is one of the subjects that supports the achievement of the objectives of implementing the 2013 curriculum. Local content is curricular activities that are adapted to the characteristics and local potential of each region (Aditya Dharma, 2019; Latifah, 2019). Local content learning is carried out to develop various skills possessed by students through regional potential such as culture, language, and customs (Latifah, 2019). The aim of providing local content lessons is that students can recognize and love the natural, social and cultural environment in the area where they live. Students can preserve and develop regional strengths and wisdom that are beneficial for national development and themselves. Javanese ksara is defined as a way or letter with its form, graphic signs, system, and writing order used in Javanese language and literature. Based on a review of the learning materials contained in the local content subject curriculum (Javanese), the Javanese script material that applies in class III of elementary school is reading the Javanese Nglegena script (Atmaja & Nugroho, 2017; Khaerunnisa et al., 2018).

The most frequently encountered educational problems are learning problems which can be caused by less effective learning processes. Ineffective learning can come from teachers, students, curriculum, school facilities and infrastructure (Maryanti & Qurrotaini, 2019). At the elementary school age stage of education, students tend to be more interested in brightly colored games that are easy to play, equipped with attractive pictures, so it will be easier to remember the learning material presented (Audia et al., 2021). The results of observations carried out in class III of Jetiskarangpung I State Elementary School, Sragen Regency show several facts about Javanese language learning, especially the material on reading Javanese script. Some of these facts include learning being dominated by classical lectures which causes teachers to focus more on the lesson so that students tend to be passive and less interested in learning. Due to these problems, teachers must create an active and enjoyable classroom atmosphere. An alternative business that teachers can run is to use learning media in the learning process. Learning media is an integrated part of the learning series, which means that learning media has an influence on the learning process so that it can make the learning process and results run well (Aliyyah et al., 2021; Amania et al., 2021; Nurwahyuni & Mahyuddin, 2021). Learning media influences how students process and ultimately understand the material because of its important role in conveying the material (Indra Sukma et al., 2022).

Survey conducted by the Program for International Student Assessment (PISA) released by the Organization for Economic Co-operation and Development (OECD) in 2019, Indonesia is ranked 62nd out of 70 countries, or is the bottom 10 countries that have low literacy levels (Amri & Rochmah, 2021). Based on the results of interviews and observations in the learning process in Class III of Jetiskarangpung I State Elementary School, Sragen Regency, students' literacy levels are still low. The problem found lies in the lack of use of learning media in learning activities, especially Javanese language learning content, Javanese Nglegena script material in class III. This influences the still low level of reading skills in understanding the Javanese Nglegena script. This can be proven by data on the results of learning Javanese language with the Javanese Nglegena script material for class III at Jetiskarangpung I Public Elementary School, Sragen Regency, which shows that the number of students with grades below the KKM is still large compared to students above the KKM, with the percentage of students passing the Javanese Nglegena script learning material being 21.875% (complete) and 78.125% (incomplete). For the Nglegena Javanese script material, the teacher uses the lecture method, while the students are passive and feel bored because there is no media used in learning. This causes students to have difficulty honing their understanding of the material, resulting in low grades in class III Javanese Nglegena script material at Jetiskarangpung I Elementary School, Sragen Regency. Based on the existing problems, improvements are needed in Javanese language learning, especially in the material for reading the Nglegena Javanese script. In this regard, learning can be successful because it is influenced by several factors, one of which is that the use of learning media is still limited to Javanese LKS books.

An alternative that can be done to improve reading skills and understanding of the Javanese Nglegena script is by developing Karawa media (Javanese Karambol Script) for class III elementary school which is packaged interestingly and creatively so that students are interested when applied to learning activities. KARAWA media is inspired by the carom game, which is a game modified with educational elements that are adapted to the elementary school curriculum. Apart from that, the rules of the game are

simpler. The carrom game is a game that relies on manual dexterity in aiming at the target. Carrom can be used to train brain intelligence through game tactics (Eni et al., 2020; Maryanti & Qurrotaini, 2019). The carrom game is a popular game among Indonesian people. The game of carrom is not a complicated game such as strategy or tactics but rather a game of dexterity and foresight in determining direction. The goal of the carrom game is to insert the carrom coin into one of the holes in the corner of the board. The fastest player to put in all the carrom coins is the winner according to the previously agreed rules (Maryanti & Qurrotaini, 2019).

Media Karawa which is an abbreviation of Javanese Karambol Script. KARAWA is a set of educational learning media to improve reading skills and comprehension of the Javanese Nglegena script in Javanese language learning content in elementary schools. The KARAWA game model is a carrom game that uses a carrom board as a playing medium with the help of reading cards and coins. Each coin is inscribed with 20 complete Nglegena Javanese characters, namely: ha, na, ca, ra, ka, da, ta, sa, wa, la, pa, dha, ja, ya, nya, ma, ga, ba, tha, and nga. Apart from that, there is one king coin to determine the course of the game. Media Karawa is equipped with reading cards which contain instructions for reading the Javanese Nglegena script sentences on the cards obtained. Reading cards consist of two types, namely 20 Karawa cards and 30 Pangarep cards. Whether or not you can read the sentences in Javanese Nglegena script on the reading cards determines the steps of the game. If the player can insert a coin into one of the holes on the carrom board, they will get a Karawa card that matches the code of the coin that has successfully entered the hole on the board, then the player reads the Javanese Nglegena script sentence on the Karawa card. However, if the player cannot insert a coin into one of the holes, he gets a pangarep card that the player chooses at random, then reads the sentence. Elementary school age children cannot be separated from the word play. Play has practical value, meaning that play is used as a medium to improve certain skills and abilities in children (Dea et al., 2021; Eni et al., 2020; Srikandi et al., 2020). Playing has benefits for children's development (Cendana & Suryana, 2021). Playing can improve children's language development. By playing children learn to know the environment, to know themselves, other people and their emotions. Language development in play can improve children's linguistic intelligence (Alam & Lestari, 2019; Rahmawati & Idawati, 2020). By playing, good communication will be established between children, their friends and their environment (Cendana & Suryana, 2021). Traditional games have higher social and educational values than modern games such as online games. Traditional games involve physical activity, creativity, group work, and emotional intelligence (Amania et al., 2021; Sri Rejeki et al., 2020). The benefit of Karawa media is to improve elementary school students' skills in reading and understanding the Javanese Nglegena script.

Previous research findings stated that the HOTS (Higher Order Thinking Skill) based carrom educational game tool as a science learning medium for Class IV Elementary Schools is suitable for application and is effective in helping the learning process (Eni et al., 2020). The similarity is the use of carrom media, while the difference lies in the learning content. Previous research was on class IV science learning content, while this research is on class III Javanese language content. IPS Expert (PS Carrom Board) as a social studies learning medium for Class IV Elementary Schools is effectively used as a learning medium in Elementary Schools (Maryanti & Qurrotaini, 2019). The similarity is the use of carrom media, while the difference lies in the learning content. Previous research was on class IV social studies learning content, while this research is on class III Javanese language content. Karophi (Carrom Operation Counting) for class IV of Pete State Elementary School, Seyegan District, Sleman Regency, Yogyakarta, is effectively used as a learning medium in elementary schools. The similarity is the use of carrom media, while the difference lies in the learning content. Previous research was on Class IV Mathematics learning content, while this research is on Class III Javanese Language content. Carrom media is an effective media and is suitable to be applied in the learning process because it can increase students' learning motivation. However, in previous research there has been no study that specifically reviews the improvement of Javanese Nglegena script reading skills for grade III elementary school with the development of carrom media. Therefore, this research aims to create Karawa media (Javanese Karambol Script) to improve the reading skills of Javanese Nglegena script for grade III elementary school.

## 2. METHOD

The method in this research is the research and development method. The research was carried out at Jetiskarangpung I Elementary School, Sragen Regency. The research subjects included 32 class III students at Jetiskarangpung I State Elementary School, Sragen Regency, class III teachers at Jetiskarangpung I State Elementary School, Sragen Regency, media experts, and material experts. The research was developed using the ADDIE model. The ADDIE model is a teaching model that is widely used by several educational designers and training programmers to develop educational and training programs (Fitriani et al., 2021). The ADDIE model has 5 stages, namely Analyze, Design, Development, Implementation, and Evaluation (Eni et al., 2020).

The first stage is the analysis stage. This stage carries out identification using teacher interviews, observations, and document studies, namely data on learning outcomes at Jetiskarangpung I Elementary School, Sragen Regency. The second stage is design, which begins with creating a framework for making Karawa media. The third stage is product development. The product design has been prepared and created in the following stages: the researcher designs and makes the KARAWA media in concrete form, then reviews the results of the media development before it is validated, once it is suitable, the product is ready to be validated. Next, instruments were created for the material and media expert team, as well as instruments for teacher and student responses. The instrument grid is presented in Table 1, Table 2, and Table 3.

**Table 1. Media Expert Instrument Grid**

Aspect	Assessment Indicators	Item	Amount Item
Suitability	Appropriate media with the topic learning	a. Displays Core Competencies, Basic Competencies and learning indicators b. Displays learning objectives c. A combination of writing and images	3
Appearance	Display design interesting	a. The size of text, images, and fonts are clearly visible in the media b. Media size c. Composition of design and color arrangement d. Selection of font type e. The appearance and placement of images in the background does not interfere with the content of the material	4
	Quality or display quality media	a. The media display is clearly visible to students b. Media durability c. The time duration is correct	3
Usage	Easy medium used by Students and teachers	a. Media is easy to use b. Media can be reused	2
Superiority	Media can Understood by user	a. Media is able to provoke student responses b. Media can provide interactive two-way communication c. Information can be received easily by students	3
<b>Amount</b>			<b>15</b>

**Table 2. Material Expert Instrument Grid**

Aspect	Assessment Indicators	Item	Amount Item
Competence	Material suitability With competence What was achieved	a. The material is in accordance with KI, KD, and learning indicators b. The material is appropriate to the learning objectives c. Material can improve cognitive aspects d. Material can improve affective aspects e. The material can improve psychomotor aspects	5
Suitability	Material suitability With media	a. The material in the media is presented in accordance with the learning objectives b. The material in the media is easy to understand c. Images are presented in sync with the material d. Media increases students' curiosity about the material	4
	Material suitability With evaluation learning	a. The evaluation questions are presented in sync with the material	1
Language	Clarity of language	a. The use of language is easy to understand b. The language used is simple c. The narrative is clear, short and informative d. Use of language in accordance with language rules	4
<b>Amount</b>			<b>14</b>

**Table 3. Teacher and Student Response Instrument Grid**

Aspect	Item	Amount Item
Appearance	a. KARAWA's media appearance is interesting	4
	b. All KARAWA media components are clearly visible	
	c. The size and font used are clear	
	d. The choice of design, color and image is precise and clear so it is easy to understand	
Material/ Content	a. The material on the KARAWA media covers the Javanese Nglegena script	2
	b. The material presented grows students' insight and knowledge in understanding the Javanese Nglegena script	
Use Media	a. KARAWA media can be studied in large and small groups	3
	b. KARAWA media motivates students to learn	
	c. KARAWA Media creates a pleasant learning atmosphere	
Time	a. The choice of time duration is correct	1
<b>Amount</b>		<b>10</b>

Implementation is the fourth stage. The ready product is then tested by material experts and media experts. These trials involve small and large group trials to find out how effective and feasible the product is. The fifth stage is the evaluation stage. After implementation, there were several shortcomings and weaknesses. Then these deficiencies and weaknesses are analyzed to improve the product so that it is more effective and meets the indicators to be achieved. When there are no revisions, it means the media is suitable for use. This research uses 3 statistical evaluation techniques and strategies, specifically quantitative descriptive methods, qualitative descriptive methods, and inferential statistical techniques (Ayu et al., 2020). In this research, data evaluation uses inferential statistics, namely data processing by applying inferential statistical formulas to test hypotheses regarding product development and conclusions are drawn from the results of testing these hypotheses (Diah Purnami Dewi et al., 2022). This method is used to determine the effectiveness of the product using evaluation results of measuring instruments before and after students observe the Karawa media. In order to find out the results of the test equipment measurements, notes were collected through pre-test and post-test (Herdyana, 2019). Before the tests and instruments used are given, the devices have been tested for validity and reliability. Validity is then measured using the point biserial correlation formula and reliability is measured using the Kuder Richadson 20 (KR-20) formula. Then the pre-test and post-test results distributed to students will be analyzed using paired sample t-tests to understand the differences between pre-test and post-test results (Kusumadewi, 2019). Expert validation interpretation criteria are presented in Table 4.

**Table 4. Expert Validation Interpretation Criteria**

Percentage	Criteria	Appropriateness
0% - 20%	Totally Not Worth It	Not feasible
21% - 40%	Not feasible	Not feasible
41% - 60%	Decent Enough	Revision
61% - 80%	Worthy	Revision
81% - 100%	Very Worth It	No Revisions

### 3. RESULT AND DISCUSSION

#### Result

The results of this development research examine 3 main points, namely the design of Karawa media, effectiveness, and feasibility of KARAWA media. The media development carried out is guided by the ADDIE development model which includes analysis, design, development, implementation, and evaluation (Eni et al., 2020). The first, is the analysis stage, problem identification activities through observation, interviewing class teachers, and document study, namely learning outcomes data at Jetiskarangpung I Elementary School, Sragen Regency. Interviews conducted with class III teachers focused on questions focused on learning content which still had many grades below the KKM, learning content and material that was still difficult for students to understand, students' attitudes towards learning, then focused on learning media. The less than optimal learning process in class III Javanese Nglegena script material is caused by a lack of learning media in the process of learning activities. The Basic Competencies and learning indicators used in the Karawa media development process are presented in Table 5.

**Table 5.**Basic Competencies and Learning Indicators

Basic competencies	Indicator
3.4 Understanding the Javanese Nglegena letters (complete 20 letter)	3.4.1 Get to know the Javanese Nglegena script
	3.4.2 Analyze sentences in the Javanese Nglegena script
	3.4.3 Rearrange the sentences in Javanese script
4.4 Read and write simple sentences Javanese Nglegena letters (complete with 20 letters)	4.4.1 Read simple sentences in Javanese letters
	4.4.1 Read simple sentences in Javanese letters

The second is the design stage, at this stage the media layout is improved in stages including preparing a media work plan starting from preparing a framework for developing concrete Karawa media (Javanese Karambol Script. The reference in making Karawa media is the product specifications that have been made. Then preparing the script to create Karawa media, after that the researcher collected equipment, namely a laptop and the Canva application to design the appearance of reading cards, carrom coins, and a guidebook for using Karawa media. The third stage of development, compiling and making concrete Karawa media, starting from carrom boards, coins, reading cards, and a guidebook for media use. Next, the researcher checked the development results again before validating them, if they were appropriate then the media product was ready to be validated by media experts and material experts. Then the researcher prepared a product validation instrument for media experts and material experts, a response instrument teachers and students, and a Karawa media design validation questionnaire conducted by media and materials experts. The results of the development of Karawa media are presented in Figure 1, Figure 2, Figure 3, Figure 4, Figure 5, Figure 6, Figure 7, and Figure 8.



Figure 1. View of the Karawa Board



Figure 2. Karawa Card Display



Figure 3. Pangarep Card Display

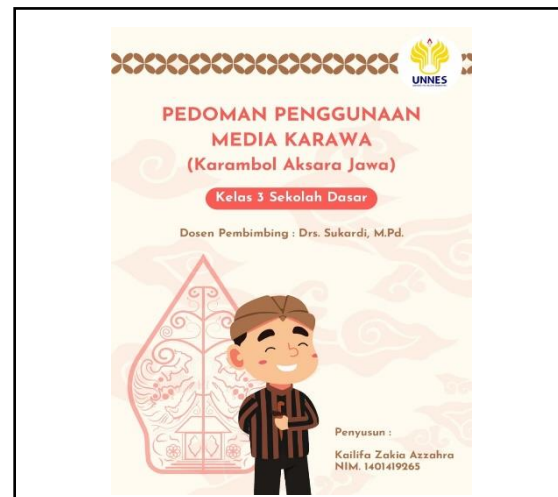


Figure 4. View of the Karawa Guidebook

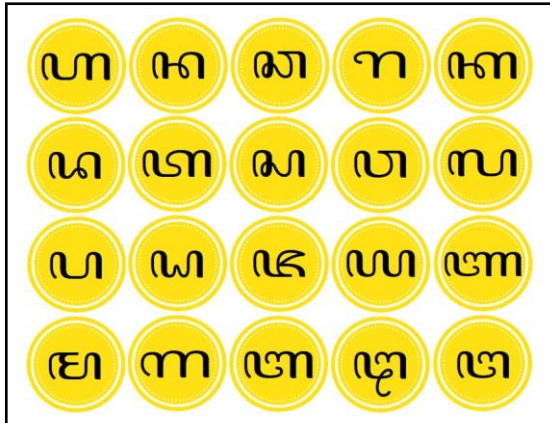


Figure 5. View of Karawa Coins



Figure 6. View of the KING Coin



Figure 7. Small Group Test



Figure 8. Large Group Test

Product validation through criticism from experts, namely class III teachers at Jetiskarangpung I State Elementary School, Sragen Regency, PGSD UNNES lecturers as media experts, and UNNES Javanese Literature lecturers as material experts. The trial was carried out with 32 class III students at Jetiskarangpung I Public Elementary School, Sragen Regency, divided into 6 students for the small group test and 26 students for the large group test. Furthermore, assessments and improvements were carried out in accordance with expert advice, small group trials and large group trials were carried out to increase the suitability of KARAWA media. The results of the validity of audio visual media are presented in Table 6.

Table 6. Product Validity Test Results

No.	Test Subjects	Validity Results	Information
1	Material Expert Test	92%	Very Worth It
2	Media Expert Test	94%	Very Worth It
3	Small Group Trials	92%	Very Worth It
4	Large Group Trials	92.6%	Very Worth It
5	Classroom Teacher Test	96%	Very Worth It

The results of the research show that the media developed, namely Karawa (Javanese Karambol Script), is very suitable to be applied in the learning process of Javanese Nglegena script material for class III at Jetiskarangpung I State Elementary School, Sragen Regency. The implementation stage is the stage in which a product is feasible and can be applied to the learning process to determine its effectiveness through the distribution of pre-test and post-test questions. The test was given twice, namely before using the product by students to measure the level of students' understanding of the Javanese Nglegena script material being taught.

Table 7. Product Effectiveness Test Results (Average)

No.	Test Subjects	Pre-test	Post-test	Sig. (2-tailed)
1	Small Group Trials	66.6	83.3	0.015
2	Large Group Trials	63.9	84.5	0,000

The results of the research show that the media developed, namely Karawa (Javanese Karambol Script), is very suitable to be applied in the learning process of Javanese Nglegena script material for class III at Jetiskarangpung I State Elementary School, Sragen Regency. This is proven by the sig results. (2-tailed)  $<0.05$  so there was a significant difference in the pre-test and post-test results on the Nglegena Javanese script material before and after the application of Karawa media in class III of Jetiskarangpung I Elementary School, Sragen Regency. Evaluation stage, in this stage assessments and improvements are carried out in accordance with expert criticism, small group trials and large group trials are carried out in order to increase the suitability of KARAWA media.

### Discussion

The research results show that Karawa media is categorized as very good, effective, and very suitable for application in the learning process. There are many factors that make Karawa media suitable for use. First, choosing the right ADDIE development model in the Karawa media development process because it consists of 5 stages starting from analysis, design, development, to small and large group trials and product improvement (Saragi & Tegeh, 2022). So that it can support the increase in the success of Karawa media. Second, Karawa media is applied to learning because it makes it easier for students to understand the Javanese Nglegena script material well, because there are reading cards that can improve reading skills in understanding the Javanese Nglegena script for class III elementary school students. Choosing the Canva application as support in designing the appearance of reading cards, carrom coins, and guidebooks as support can help teachers optimize the learning process so that it becomes more interesting. Karawa media in the form of game media can save time so that students' reading skills are implemented directly.

The third, the material presented is in accordance with KI, KD, indbinders, and learning objectives. The material presented is packaged sequentially and completely, making it easier for students when using Karawa media. The media is equipped with a guide book, making it easier for students to play Karawa media. Material that is arranged coherently and varied makes it easier for students to digest the content of the material (Coles, 2019; Diah Purnami Dewi et al., 2022; Yeh et al., 2020). A person's learning outcomes are obtained through direct experience (concrete), the reality that exists in a person's life environment then through artificial objects to verbal symbols (abstract) (Permatasari et al., 2019; Widyaningsih et al., 2020). The medium for conveying a message becomes more abstract the further it goes to the top of the cone, according to Edgar Dale in Dale's Cone of Experience (Sari, 2019). Karawa media is included in the third category from the top of the cone which includes the levels of word symbols, visual symbols and still images. Media Karawa is included in the still image category because it has Javanese script images that are interesting and relevant to the learning material. Media Karawa can sharpen students' attention and awareness of the material presented (Rahmatullah et al., 2020). The concrete application of Karawa media really supports the learning process, thereby realizing better learning quality and increasing students' interest in learning. Therefore, the use of Karawa media can provide students with a deeper and easier to understand material experience in the learning process, so that students are not only limited to knowing the material but are able to improve their reading skills in the Javanese Nglegena script.

The fourth, carrom media is suitable for use and is effective in helping the learning process and improving reading comprehension skills. The advantages of this research are that the media can be played individually and in groups, improves the motor system because it uses concrete media, increases students' speed in answering Javanese Nglegena script questions on reading cards, uses quality materials so they are not easily damaged, and increases students' ability to answer script questions. Javanese is legendary because it is arranged randomly so that the sentences that are read are different. Karawa media requires a place to store because it consists of several components, namely a carrom board, coins, reading cards and a guidebook for using the media.

This finding is reinforced by previous research findings stating that the HOTS (Higher Order Thinking Skill) based carrom educational game tool as a science learning medium for Class IV Elementary Schools is suitable for application and is effective in helping the learning process (Eni et al., 2020). IPS Expert (PS Carrom Board) as a social studies learning medium for Class IV Elementary Schools is effectively used as a learning medium in Elementary Schools (Maryanti & Qurrotaini, 2019). The limitation of this research is that it only focuses on developing learning media on the Javanese Nglegena script material for class III elementary school. The implication of this research is to increase knowledge regarding Javanese language learning theory, especially regarding Javanese Nglegena script material, the development of Karawa media can help teachers in delivering Javanese Nglegena script material for Class III elementary school Javanese language learning content.



#### 4. CONCLUSION

Karawa media can be used as an effective learning tool to improve the reading skills of Javanese Nglegena script for third grade elementary school students. This research can increase knowledge and insight regarding the development of Karawa media in learning activities, for teachers to add references in Javanese language learning, especially to improve students' reading skills and understanding of the Javanese Nglegena script. For schools, providing encouragement and motivation to schools to develop learning media according to needs. Apart from that, it provides a general overview of the development of learning media that is interesting, innovative, fun, creative, and easy for students to understand and use.

#### 5. REFERENCES

- Adelia Firmandasari, R., Suryawinata, M., Nur Hasanah, F., & Sri Untari, R. (2020). Game Bahasa Jawa Krama Sebagai Media Pembelajaran Anak Berbasis Android. *Jurnal Ilmiah Penelitian Dan Pembelajaran Informatika*, 5(2), 150–160. <https://doi.org/10.29100/jipi.v5i2.1807>.
- Aditya Dharma, I. M. (2019). Pengembangan Buku Cerita Anak Bergambar Dengan Insersi Budaya Lokal Bali Terhadap Minat Baca Dan Sikap Siswa Kelas V Sd Kurikulum 2013. *Journal for Lesson and Learning Studies*, 2(1), 53–63. <https://doi.org/10.23887/jlls.v2i1.17321>.
- Alam, S. K., & Lestari, R. H. (2019). Pengembangan kemampuan bahasa reseptif anak usia dini dalam memperkenalkan bahasa inggris melalui flash card. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 4(1), 274–279. <https://doi.org/10.31004/obsesi.v4i1.301>.
- Aliyyah, R. R., Amini, A., Subasman, I., Sri, E., Herawati, B., & Febiantina, S. (2021). Upaya Meningkatkan Hasil Belajar Ipa Melalui Penggunaan Media Video Pembelajaran. *Jurnal Sosial Humaniora*, 12(1), 54–72. <https://doi.org/10.30997/jsh.v12i1.4034>.
- Amania, M., Nugrahanta, G. A., & Irine Kurniastuti. (2021). Pengembangan Modul Permainan Tradisional sebagai Upaya Mengembangkan Karakter Adil pada Anak Usia 9-12 Tahun. *Elementary School*, 8(2), 237–251. <https://doi.org/10.31316/esjurnal.v8i2.1230>.
- Amri, S., & Rochmah, E. (2021). Pengaruh Kemampuan Literasi Membaca Terhadap Prestasi Belajar Siswa Sekolah Dasar. *Jurnal Pendidikan Dasar*, 13(1). <https://doi.org/10.17509/eh.v13i1.25916>.
- Ariani, D. (2020). Pengembangan Media Karsawa (Kartu Aksara Jawa) Untuk Pembelajaran Menulis Aksara Jawa Di Kelas III Sekolah Dasar. *Jurnal Penelitian Dan Pendidikan Sekolah Dasar*, 8(1), 154–164. <https://ejournal.unesa.ac.id/index.php/jurnal-penelitian-pgsd/article/view/33614>.
- Atmaja, S. B., & Nugroho, D. (2017). Upaya-upaya pengelolaan sumber daya ikan yang berkelanjutan di Indonesia. *Jurnal Kebijakan Perikanan Indonesia*, 3(2), 101–113.
- Audia, C., Yatri, I., Aslam, Mawani, S., & Zulherman. (2021). Development Of Smart Card Media For Elementary Students. *Journal Of Physics: Conference Series*, 1783(1), 012114. <https://doi.org/10.1088/1742-6596/1783/1/012114>.
- Ayu, I., Widyaningsih, T., Ketut Dibia, I., & Sudana, D. N. (2020). Instrument Appropriateness On The Assessment Of Fourth Grade Science Learning Outcomes In Elementary Schools. *International Journal of Elementary Education*, 4(4), 472–480.
- Cendana, H., & Suryana, D. (2021). Pengembangan Permainan Tradisional Untuk Meningkatkan Kemampuan Bahasa Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(2), 771–778. <https://doi.org/10.31004/obsesi.v6i2.1516>.
- Coles, A. (2019). Facilitating The Use of Video with Teachers of Mathematics: Learning From Staying With The Detail. *International Journal of Stem Education*, 6(1). <https://doi.org/10.1186/S40594-018-0155-Y>.
- Dea, L. F., Yusuf, M., Anwar, M. S., Choirudin, C., & Juniati, D. A. (2021). Alat Permainan Edukatif Golf Anak Usia Dini sebagai Program Edupreneur Prodi Pendidikan Islam Anak Usia Dini. *Golden Age: Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini*, 6(1), 25–36. <https://doi.org/10.14421/jga.2021.61-03>.
- Diah Purnami Dewi, P., Wayan Suniasih, N., & Kunci, K. (2022). Media Video Pembelajaran Matematika Berbasis Etnomatematika Pada Muatan Materi Pengenalan Bangun Datar. *Jurnal Edutech Undiksha*, 10(1), 156–166. <https://doi.org/10.23887/Jeu.V10i1.44775>.
- Eni, U. A., Wijayanti, A., & Ardiyanto, A. (2020). Pengembangan Alat Permainan Edukatif Karambol Berbasis Hots (Higher Order Thinking Skill) Sebagai Media Pembelajaran IPA Kelas IV Sekolah Dasar. *Jurnal Pijar Mipa*, 15(5), 509–514. <https://doi.org/10.29303/Jpm.V15i5.1627>.
- Fitriani, H., Imanda, R., Rahmi, A., & Nurmalinda, S. (2021). The Development of Flashcard Learning Media Based on Make A Match On Colloid. *International Journal for Educational and Vocational Studies*, 3(5), 373. <https://doi.org/10.29103/Ijevs.V3i5.6069>.
- Herdyana, T. (2019). The Development of Smart Card-Based Media on The Beauty Of Togetherness Themes In Fourth Class Elementary School Of 026609, South Binjai District. *Budapest International*

- Research and Critics in Linguistics And Education (Birle) Journal*, 2(2), 215–234. <https://doi.org/10.33258/Birle.V2i2.292>.
- Indra Sukma, K., Handayani, T., & Muhammadiyah Hamka, U. (2022). Pengaruh Penggunaan Media Interaktif Berbasis Wordwall Quiz Terhadap Hasil Belajar IPA Di Sekolah Dasar. *Jurnal Cakrawala Pendas*, 8(4). <https://doi.org/10.31949/jcp.V8i2.2767>.
- Khaerunnisa, F., Sunarjan, Y., & Atmaja, H. T. (2018). The Effect of Using Power Point Media on the Interest in Learning History of Class X Students of SMA Negeri 1 Bumiayu for the 2017/2018 Academic Year. *Indonesian Journal of History Education*, 6(1), 31–41.
- Kusumadewi, S. (2019). Development Of Quiz Card Media to Improve Reading Skills and Critical Thinking on Student. *International Journal of Educational Research Review*, 4(3), 367–372. <https://doi.org/10.24331/ijere.573874>.
- Latifah, N. N. (2019). Pembelajaran Muatan Lokal Bahasa Jawa Dalam Pelaksanaan Kurikulum 2013 Di SDN Sambiroto 01 Semarang. *Jurnal Pendidikan Dasar UNY*, 10(1), 149–158. <https://doi.org/10.21009/10.21009/JPD.081>.
- Lestari, H. Y. A., Riyadi, R., Kamsiyati, S., & Purnamasari, V. (2021). Pengembangan Bahan Ajar Berbasis Muatan Lokal Keanekaragaman Motif Batik Ngawi sebagai Sumber Belajar di Sekolah Dasar. *Jurnal Basicedu*, 5(1), 418–433. <https://doi.org/10.31004/basicedu.v5i1.721>.
- Maryanti, R. D., & Qurrotaini, L. (2019). Pengembangan Papan Karambol IPS Sebagai Alat Permainan Edukatif Kelas IV Sekolah Dasar. *Jurnal Pendidikan Ilmu Pengetahuan Sosial*, 5(2). <https://doi.org/10.18860/jpips.v5i2.7503>.
- Nazhiroh, S. A., Jazeri, M., & Maunah, B. (2021). Pengembangan Multimedia Interaktif E-Komik Dalam Meningkatkan Hasil Belajar Bahasa Jawa. *Jurnal Ilmiah Profesi Pendidikan*, 6(3), 405–411. <https://doi.org/10.29303/jipp.V6i3.193>.
- Nurwahyuni, E., & Mahyuddin, N. (2021). Penilaian Perkembangan Bahasa Anak Usia Dini Umur 5-6 Tahun Pada Masa New Normal Di Taman Kanak-Kanak Ridhotullah Padang. *Jurnal Cikal Cendekia*, 02(01), 11–23.
- Permatasari, B. D., Gunarhadi, & Riyadi. (2019). The influence of problem based learning towards social science learning outcomes viewed from learning interest. *International Journal of Evaluation and Research in Education*, 8(1), 39–46. <https://doi.org/10.11591/ijere.v8i1.15594>.
- Prayoga, D. S., Utaya, S., & Sumarmi. (2019). Internalisasi Kearifan Lokal Dalam Pembelajaran melalui Pengembangan Multimedia Interaktif Muatan Pembelajaran IPS. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, 4(11), 1457–1463. <https://doi.org/10.17977/jptpp.v4i11.12990>.
- Rahmatullah, R., Inanna, I., & Tenri Ampa, A. (2020). Media Pembelajaran Audio Visual Berbasis Aplikasi Canva. *Jurnal Pendidikan Ekonomi Undiksha*, 12(2). <https://doi.org/10.23887/jjpe.v12i2.30179>.
- Rahmawati, & Idawati. (2020). Analisis Media Pembelajaran Bahasa Indonesia Anak Berkebutuhan Khusus Jenis Tunarungu. *Jurnal Pembelajaran Bahasa Dan Sastra Indonesia*, 1, 32–39. <https://doi.org/10.26858/indonesia.v1i1.12393>.
- Saragi, R., & Tegeh, I. M. (2022). Media Pembelajaran Berbasis Problem Based Learnig Menggunakan VideoScribe untuk Meningkatkan Hasil Belajar IPS Siswa Kelas V. *Jurnal Edutech Undiksha*, 10(1), 98–107. <https://doi.org/10.23887/jeu.v10i1.41538>.
- Sari, P. (2019). Analisis Terhadap Kerucut Pengalaman Edgar Dale Dan Keragaman Gaya Belajar Untuk Memilih Media Yang Tepat Dalam Pembelajaran. *Jurnal Manajemen Pendidikan*, 1(1). <https://doi.org/10.55352/mudir.v1i1.7>.
- Sri Rejeki, H., Bulubaan, A., Ardiansyah, A., & Tadulako, U. (2020). Implementasi Permainan Tradisional Sebagai Salah Satu Sarana Pendidikan Karakter Di Sekolah Dasar. *Tadulako Journal Sport Sciences And Physical Education*, 8(1). <http://jurnal.untad.ac.id/Jurnal/Index.Php/Pjkr/Index>.
- Srikandi, S., Suardana, I. M., & Sulthoni. (2020). Membentuk Karakter Anak Usia Dini melalui Permainan Tradisional. *Jurnal Penelitian: Teori, Penelitian Dan Pengembangan*, 5(12). <https://doi.org/10.17977/jptpp.v5i12.14364>.
- Widyaningsih, T., Dibia, K., & Sudana, N. (2020). Instrument Appropriateness on The Assessment of Fourth Grade Science Learning Outcomes in Elementary School. *International Journal of Elementary Education*, 4(4). <https://doi.org/10.23887/ijee.v4i4.27209>.
- Yeh, H. C., Heng, L., & Tseng, S. S. (2020). Exploring the impact of video making on students' writing skills. *Journal of Research on Technology in Education*, 53(4), 446–456. <https://doi.org/10.1080/15391523.2020.1795955>.