



IMPLEMENTATION OF THE JAVANESE ALPHABET EDUCATIVE GAME "JABLE BOARD" TO INCREASE STUDENTS' LEARNING INTEREST AND MOTIVATION

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Abstract

Students' low interest in learning Javanese alphabet makes their learning outcomes not optimal in Javanese language subjects, so interesting learning methods are needed to motivate and increase their learning interest. Jable Board is a scrabble-based Javanese alphabet board game. This medium is useful for preserving, reviving, and supporting the learning of the Javanese alphabet to make it easier to understand. Based on the product validation test, qualitative data were obtained in the form of sound response, button accuracy, and battery life, which were classified as good. Quantitative data is also obtained from teachers and generation Z questionnaires, which are very good, so this game is feasible to implement. The aim is to determine the effectiveness of Jable Board in improving student learning outcomes. The research was conducted using a quasi-experimental method with 36 students in class X-E1, SMAN 3 Sidoarjo. The results of a student questionnaire about Jable Board, which showed that it was able to increase interest in learning by 86%, increase pretest and posttest scores by 24.18%, and receive positive responses from the school, showed that Jable Board was able to attract interest in learning and motivate students to learn Javanese alphabet, which can improve student learning outcomes.

Keywords: board game; learning interest; generation z; javanese alphabet

Abstrak

Minat siswa yang rendah dalam mempelajari Aksara Jawa membuat belum optimalnya hasil belajar mereka pada mata pelajaran bahasa Jawa sehingga diperlukan metode pembelajaran yang menarik untuk memotivasi dan meningkatkan minat belajar mereka. Jable Board adalah permainan papan aksara Jawa berbasis scrabble. Media ini bermanfaat untuk melestarikan, menghidupkan kembali aksara Jawa, dan menunjang pembelajaran aksara Jawa menjadi lebih mudah dipahami. Berdasarkan uji validasi produk diperoleh data kualitatif berupa respon suara, akurasi tombol, dan daya tahan baterai yang tergolong baik. Data kuantitatif juga didapatkan dari guru dan angket generasi Z yang sangat baik sehingga game ini layak untuk diterapkan. Tujuan dari penelitian ini adalah untuk mengetahui keefektifan Jable Board dalam meningkatkan hasil belajar siswa. Penelitian dilakukan dengan menggunakan metode eksperimen semu pada siswa kelas X-E1 SMAN 3 Sidoarjo dengan jumlah siswa 36 orang. Hasil angket siswa tentang Jable Board yang menunjukkan mampu meningkatkan minat belajar sebesar 86%, mampu meningkatkan nilai pretest dan posttest sebesar 24,18%, serta respon positif dari pihak sekolah menunjukkan bahwa Jable Board mampu menarik minat belajar dan memotivasi siswa untuk mempelajari Aksara Jawa sehingga dapat meningkatkan hasil belajar siswa.

Kata kunci: papan permainan; minat belajar; generasi z; aksara jawa

INTRODUCTION

The transformation of the 2013 Curriculum into an Merdeka curriculum has taken place. The Merdeka curriculum has been implemented in several schools since 2022. The freedom to learn focuses the implementation of learning on students (student centers), so students are encouraged to actively participate in school (Directorate of Elementary Schools, 2022b). As recorded in RI Law No. 20 of 2003, the activeness of students in learning can improve their morals, intelligence, and skills, so it is very necessary.

To get active students, it is necessary for them to have interest and motivation to learn so that a comfortable learning atmosphere can be created and student learning outcomes can be optimal. According to Kartika, students' interests are strongly influenced by the facilities and infrastructure used by teachers in supporting the teaching and learning process (Kartika et al., 2019). Therefore, in the teaching process, teachers are required to find and implement creative and innovative learning methods that are student-centered in accordance with the Merdeka curriculum rather than conducting learning with the lecture method, which is only teacher-centered.

Creative and innovative teacher learning methods are needed for all subject areas in general, including Javanese language lessons, especially in the Javanese alphabet chapter. This is due to the low interest of students in learning Javanese alphabet, so student learning outcomes in Javanese language subjects are not optimal. In

general, students find it difficult to distinguish the form of one script from another (Insani et al., 2022).

According to Sri Sultan Hamengkubuwono X as the Governor of DIY at the First Javanese alphabet Congress, this low interest was due to the few users of the Javanese alphabet and the infrequent implementation of the Javanese alphabet in daily life, which made the Javanese alphabet seem foreign (Sleman, 2021). According to Avianto and Prasida's interview results, there is also a mindset among students who think that learning Javanese alphabet makes them seem old-fashioned (Avianto & Prasida, 2018). Such a view is contrary to the profile of Pancasila students in the Merdeka curriculum in the fourth dimension, namely, global diversity, which requires Indonesian students to maintain noble culture, locality, and national identity, so that this is the reason that the Javanese alphabet needs to be preserved (Elementary School Directorate, 2022). In addition, preserving the Javanese alphabet is part of our concern for protecting the Javanese language so that it does not become claimed by other countries and as a form of respect by the Javanese people for the ancestors who created the Javanese alphabet (Mohamed, 2001). Javanese alphabet is useful in protecting local products as well as state privacy. By displaying local culture or state privacy using Javanese alphabet, foreigners need to study Javanese alphabet first if they want to steal or plagiarize these things. There is also the Javanese alphabet, which is an asset for the Indonesian nation because not all countries have their own

regional alphabet. According to Wijaya, at least it has been identified that Javanese script and numerals are one of the local characters that exist in several other scripts, such as non-Latin Thai scripts and Indian characters (Wijaya, 2020). so this is a unique and special pride for the Indonesian people to have the Javanese alphabet (Roza, 2017).

By looking at the various benefits of preserving the Javanese alphabet, students need to generate interest and motivation to learn with fun learning methods. According to Apriani and Islami, the play-based learning method is considered effective in attracting students' interest because it is cooperative so that students more easily understand the material being discussed (Apriani et al., n.d.). This learning method is suitable for introducing and deepening the Javanese alphabet because learning the alphabet requires repeated practice. So with a fun playing method, students will tend to repeat the game.

Board games are one of the learning support media that are very effective in attracting students' interest (Nurfaizah et al., 2021). Many Javanese alphabet board games have been produced by previous researchers, but there are some things that need to be improved. From Avianto and Prasida's previous research, researchers found that there was a missing element, namely Aksara Swara (Avianto & Prasida, 2018). Previous researchers symbolized the Aksara Swara by color so that it could not be realized when writing Javanese alphabet, even though the swara alphabet was one of the alphabets that were often used in the Javanese alphabet. There are also previous researchers

belonging to Fajarizka and Rizkiantono who found that elements of monopoly cards with pictures and a few numbers are less effective (Fajarizka & Eka, 2016). It is because they will make players tend to memorize pictures instead of reading Javanese alphabet, so they cannot be played in the long term.

For some of the things that have not been optimal above, the researchers took the initiative to evaluate, develop, and then implement them. There is a Javanese alphabet game medium called Jable Board, which is a scrabble-based Javanese alphabet board game that is integrated using the "barcode scanner to sound" feature to recognize the sound of each character. Jable Board has been very well validated for its functionality, media, and content, making it feasible to implement. According to observations at SMA Negeri 3 Sidoarjo, board game media is rarely implemented as a learning medium, so the application of Jable Board has the opportunity to attract students' interest in motivating students to learn the Javanese alphabet, bearing in mind the purpose of this research is to determine the effectiveness of Jable Board in improving student learning outcomes.

METHOD

The research method used in this research is quasi-experimental, in which the final results and values for the effectiveness of the Jable Board will be obtained and measured through questionnaires and interviews. The quasi-experimental design in this study used a design model with a control group and pre-treatment

measurements of the untreated control group with dependent pre- and post-test samples (Shadish et al. 2002).

This research was conducted at SMA Negeri 3 Sidoarjo in July 2022, in the odd semester of the 2022–2023 academic year. The target or experiment variable of this study was 36 students from Grade 10 E-1 who, at that time, were studying the Javanese alphabet chapter. Meanwhile, the control variables in this study came from other 10th graders who did not use the Jable Board to support learning.

The type of research procedure follows Hastjarjo's research treatment (2015). After determining the control variables and experimental variables, a pre-test was applied to the experimental variable students (student 10 E-1) and controls to determine the size of the ability to know Javanese alphabet that they already had and to generalize students' abilities in group divisions. After the method of playing Jable Board was explained, Jable Board media was implemented for 10 E-1 students to see the enthusiasm, interest, and motivation of students in thinking creatively to compose a word using Javanese alphabet with the concept of playing scrabble.

The implementation ended with a post-test for all 10th grade students to find out their learning outcomes, both after using the Jable Board media and for those who did not use the Jable Board media. In addition, after playing Jable Board, several 10 E-1 students were interviewed, and a questionnaire was filled out regarding students' interest in Jable Board media in influencing their interest in learning Javanese

alphabet. The results of measuring the effectiveness of the Jable Board were analyzed using a Likert scale with a score range of 1-5. Score 1 indicates "strongly disagree", score 2 indicates "disagree", score 3 indicates "neutral", score 4 indicates "agree", and score 5 indicates "strongly agree". So that the proportion of students' interest in learning Javanese alphabet after playing Jable Bord can be measured using the formula:

$$P = \frac{F}{N} \times 100\%$$

P = Percentage of student answers

F = Number of respondents' answers

N = Respondent score

Apart from its interest, the effectiveness of the Jable board is seen through its success in improving student learning outcomes after carrying out the post-test. The percentage increase in student learning outcomes can be calculated using the formula:

$$P = \frac{M - m}{m} \times 100\%$$

P = Percentage increase in learning outcomes

M = Mean after the post test

m = Mean after pre test

After that, the average post-test results will be categorized according to Arikunto's criteria as follows:

Table 1. Category of Learning Outcomes (Arikunto, 2013)

Score	Criteria
≥85	Very good
70-85	Good
55-70	Enough
40-55	Not enough
≤40	Very less

The percentage results obtained will be measured for their effectiveness in attracting student interest based on criteria such as those in

Table 2. Criteria Scale of Students' Interest in Learning (Sudjana et al., 2014)

Percentage (%)	Criteria
0-20	Very less
21-40	Not enough
41-60	Enough
61-80	Good/Valid
81-100	Very Good/Very Valid

Sudjana's research (2014) in the following table:

Table 3. Results of the Student Learning Interest Questionnaire

No.	Statement	Percentage	Information
1.	I like Jable Board	85,3%	Very good
2.	I find Jable Board a fun educational game	89,3%	Very good
3.	I am interested in playing Jable Board with friends	86,7%	Very good
4.	Jable Board can increase my interest in learning Javanese alphabet	78,7%	Good
5.	Jable Board can help me memorize Javanese alphabet	89,3%	Very good
6.	Jable Board can help preserve the Javanese alphabet	86,7%	Very good
7.	I feel that the Jable Board can be used as a supporting medium in learning Javanese alphabet	88,0%	Very good
8.	Jable Board can improve my skills and knowledge regarding Javanese alphabet	81,3%	Very good
Average		86%	Very good

Based on table 3, the researcher gave eight statements to be assessed by class X-E1 students who had participated in the Jable Board implementation. The first statement, "I like Jable Board," was given to find out the students' first impressions and whether Jable Board attracted their attention to be played. It is because first

impressions are an important element to pay attention to. When consumers consume a product, their first impression determines

RESULTS AND DISCUSSIONS

Based on the scale of students' interest in learning criteria developed by Sudjana (2014), researchers used this criterion as a scale of measurement of students' responses regarding the level of interest and motivation to learn Javanese alphabet after playing Jable Board. The following is the recapitulation data in Table 3:

whether they will use it again or not (Muzaqqi et al., 2016). As with this implementation, the first impression will determine whether this Jable Board is suitable for students to play again or not. It is shown in the table that it is 85.3%, or about 4.3 out of 5 points given in the average rating by the students in this first statement. This shows

that Jable Board succeeded in attracting their attention.

In statement 2, the researcher gave the students the statement "I find Jable Board a fun educational game" with the intention of knowing their rating and whether they enjoyed playing Jable Board. This is due to the importance of students enjoying the learning process so they can understand the material well (Cholik, 2017). Knowing this rating, it can be seen from the continuity of the Jable Board that this medium is not boring, even though it is played for a long time. It is shown that the rating from statement 2 is 89.3%, or about 4.5 points on average. This proves that students enjoy playing Jable Board and do not make it a burden when this medium is used as a learning media.

In the third statement, "I am interested in playing Jable Board with friends" is given a rating in order to know whether Jable Board can trigger students to become more sociable and interactive because the game is designed to be played by more than one person. A rating of 86.7%, or an average of around 4.3 out of 5 points, was obtained by students, which indicated that Jable Board was able to make students more active, interactive, and sociable so that student-centered learning in the independent curriculum actually took place.

It is clear in statement 4 that the purpose of the researcher's giving the statement "Jable Board can increase my interest in learning Javanese alphabet" is to find out whether Jable Board makes them interested in learning and getting to know more about Javanese alphabet because, of course, interest and willingness from

students are needed before enjoying the learning process. of the material to be presented. It shows the students' rating of 78.7%, or about 4 out of 5 points on average. This means that Jable Board is good at getting people to learn Javanese alphabet more deeply.

In statement 5, "Jable Board can help me memorize Javanese alphabet" is given to find out whether the Jable Board is effective in helping students memorize Javanese alphabet because the researcher completes the Jable Board with a barcode scanner and a sound feature to make it easier for students to memorize Javanese alphabet. It is proven by a rating of 89.3%, or around 4.5 points on average, that this feature is very effective and useful so that students can be assisted in memorizing Javanese alphabet.

"Jable Board can help preserve the Javanese alphabet", statement 6 is included to find out the agreement of the students through the rating, namely whether the jable board is able to help preserve the Javanese alphabet which is rarely used in everyday life. Based on the results of this questionnaire, it was obtained an average of 86.7% or around 4.3 out of 5 points which indicated that they strongly agreed that the Javanese alphabet could be helped to be preserved by this media.

In addition, the researcher included the statement 7, "I feel that the Jable Board can be used as a supporting medium in learning the Javanese alphabet". This statement is included to find out whether the Jable Board can really be a support in learning Javanese alphabet, according to students. The students' rating of 88%, or around 4.4 out of 5 average points, was obtained

from the questionnaire, which proved that the Jable Board had a very good role as a support in learning Javanese alphabet.

The last statement is statement 8 "Jable Board can improve my skills and knowledge regarding the Javanese alphabet". This was given in a questionnaire aiming to find out the effectiveness of the Jable Board in broadening students' insight into the Javanese alphabet after playing it. After calculating, the result of the students' agreement was 86%, or an average of about 4.3 out of 5 points. This means that they agree that Jable Board is very good at broadening their knowledge of Javanese alphabet.

With all the results in Table 3, the student interest questionnaire shows an average result of 86%. This shows that the ability of Jable Board media to attract students' interest and motivation to learn the Javanese alphabet is very good. The introduction of learning that is integrated with game media will make learning activities fun (Pratama et al. 2019).

Based on the results of interviews with several students who agreed to be interviewed, it was found that their interest in learning Javanese

scores of X-E1 students were also higher than those of other X-E classes, which, based on Arikunto's categorization, were very good.

alphabet had increased because the Jable Board's innovative barcode scanner to sound feature was a feature that could help them recognize and memorize Javanese alphabet. This is in and "audio-visual" (Sutjiono, 2005). In addition, Jable Board can increase their creative power because the way to play requires creativity in processing Javanese characters to form one word. Jable Board can improve their absorption of Javanese alphabet because of its cooperative learning style.

According to Suprpto (2013), as students' interest and motivation in learning grow, so does their absorption in learning. This is evidenced by the results of student learning after X-E1 using the Jable Board. A comparison of the results of the post-test for class X-E1 with other classes that did not use the Jable Board showed that the learning outcomes of class X-E1 students were better and more improved than the learning outcomes of other classes. The learning outcomes data are in the following table:

Table 4. Comparison of Student Learning Outcomes in Class X-E1 with Other Class X

Class	The Average Score of The Pre Test	The Average Score of The Post Test	Percentage Increase in Score (%)
X-E1	74,15	92,08	24,18
Other Class X	76,62	88,40	16,68

According to Table 4, the learning outcomes of X-E1 students increased more significantly by 24.18% compared to other X-E1 students who did not use the Jable Board, which only increased by 16.68. The average post-test

Referring to Buchari's journal, in schools, teachers play an important role in implementing learning (Buchari, 2018). So besides to Jable Board assessments by students, assessments and positive responses from teachers

or school officials are also measures of the success of implementing this board game. The researcher conducted interviews with four school officials from SMAN 3 Sidoarjo, namely the regional language subject teacher, the vice principal of the curriculum school, the vice principal of student affairs, and the school principal.

The local language subject teacher, Dony Ardhianto, commented that this medium helped him a lot because students could be serious and happy while learning Javanese alphabet at the same time. He said that this learning medium was effective, the rules of the game were flexible, and he would always use it every time he taught Javanese alphabet. There was also a positive response from the vice principal of the curriculum school, Asnan Wahyudi, who responded that he was very proud of the implementation of the Jable Board; this medium was made creatively, innovatively, and fun, so that he hoped to be able to support students' competency achievement in Javanese language subjects. Other positive response came from the vice principal of the student school, Bambang Wahyudi, who said that Jable Board media was creative media. The implementation of this medium is extraordinarily useful and helps the learning process. Jable Board can be an inspiration or reference for making learning media in other subjects. In addition, there was a positive response from the principal of SMAN 3 Sidoarjo, Ristiwi Peni. She said that the Jable Board media was very interesting and unique because it used Javanese alphabet. This learning medium can make SMAN 3 Sidoarjo students love and like Javanese alphabet as part of the

culture of Indonesia. They can study without burden because this medium is interesting. It is hoped that this board game can continue to be used for real learning in the world of education.

From the various indicators of success in the form of questionnaires on student interest in learning, student interviews, improving student learning outcomes, teacher responses, and school-side responses, it can be concluded that Jable Board implementation gave positive results so that it succeeded in attracting interest and motivating students to learn Javanese alphabet effectively.

CONCLUSION

Jable Board is an educational medium that supports cooperative Javanese learning. The results of implementing the Jable Board board game were able to increase students' interest and motivation in learning Javanese alphabet by 86%. Based on the results of interviews with several students, Jable Board is a fun medium and really helps them learn Javanese alphabet. This is the reason that the Jable Board can improve student learning outcomes in the Javanese alphabet chapter by 24.18%. Thus, the Jable Board is considered effective in supporting Javanese language learning.

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