



Exploring Javanese Script Reading through Adventure Games with the TGT Approach in Primary Schools

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ABSTRACT

Cultural preservation must be carried out by the entire community and institutions. One effective way to preserve culture is by introducing regional culture through educational institutions. In terms of teaching Javanese script, there are many obstacles that must be overcome, one of which is the low enthusiasm of students who consider the local curriculum to be unimportant. It is implemented by playing a Javanese script adventure game in one of the cycles of classroom action research on the ability of primary school students to read Javanese script. The data analysis technique used was phenomenological descriptive analysis. The results of this study were quite satisfactory because it succeeded in increasing the students' formative test scores to 83% of students who were able to exceed the minimum passing grade. The problem encountered was the assumption that it was not necessary for someone to learn Javanese script because they came from a different ethnic group. Furthermore, the results of this study also show that there are obstacles in the learning process when one student dominates the game without involving other group members because they think their friends are unable to do the task correctly. However, the results of the study also show the success of groups that are able to work together in solving problems by coming up with innovative ideas.

INTRODUCTION

One effective way to preserve culture is by incorporating regional cultural awareness into educational institutions. The local content curriculum in DIY is regulated in DIY Governor Regulation No. 64 of 2013 concerning Javanese Language as Compulsory Local Content in Schools/Madrasahs. In practice, the preservation of regional culture through educational institutions faces various obstacles or problems that we encounter in the field. Specifically, in the preservation of Javanese letters in DIY, the implementation of its teaching is not as easy as expected so that it can be absorbed by students as one of the cultural characteristics inherent in themselves. Complaints about the difficulty of memorising, reading, writing, or learning Javanese letters are often voiced by students or their parents. Modules and media for reading Javanese letters do exist, both in digital and conventional forms, which are expected to facilitate memorisation and reading of Javanese letters. However, this is still not considered sufficient to motivate students to integrate cultural characteristics or citizenship, especially Javanese letters, into their cognitive mindset. The scaffolding that is built can take the form of various methods or media to attract and motivate students so that the learning objectives are ultimately achieved. One medium that can attract the attention of fourth grade students, who are still in the 9-11 age range, is games. This study utilised a letter adventure game to provide engaging challenges that foster responsibility, cooperation, healthy competition, and learning engagement among students in order to improve their Javanese literacy skills. This phenomenal qualitative study examines how the TGT cooperative learning method fosters responsibility, cooperation, healthy competition and learning engagement among students in order to improve their Javanese literacy skills.

LITERATURE REVIEW

Because local content is a subject that receives little attention from students and parents, teachers need to build scaffolding as facilitators to maximise the ZPD (zone of proximal development). According to Supardan (2016), Lev S. Vygotsky's theory of ZPD (Zone of Proximal Development) can build or improve a person's knowledge. Where initial knowledge or potential knowledge in solving problems independently with the help of scaffolding from adults or the surrounding environment can increase a person's knowledge. Cognitive functions, including literacy skills, develop through social interaction and a person's cultural context. In Vygotsky's theory, in a child's learning process, there is an area where the child must be given external assistance to be able to learn new things until the child can then learn independently without assistance. Vygotsky emphasised the importance of the presence of others, such as teachers, parents, or friends, who are termed as the more knowledgeable others in providing scaffolding (temporary support) so that students can achieve a higher level of understanding. In several similar studies, students generally have the same problem of low Javanese letters reading ability (Estianti, et.al., 2021; Khoirina, 2025; Sunarsih, 2017; Tanuwijaya, 2023; Wiranti & Sutriyani, 2020). One study that successfully addressed this problem was the use of the Jigsaw Cooperative Learning method conducted by Sunarsih (2017).

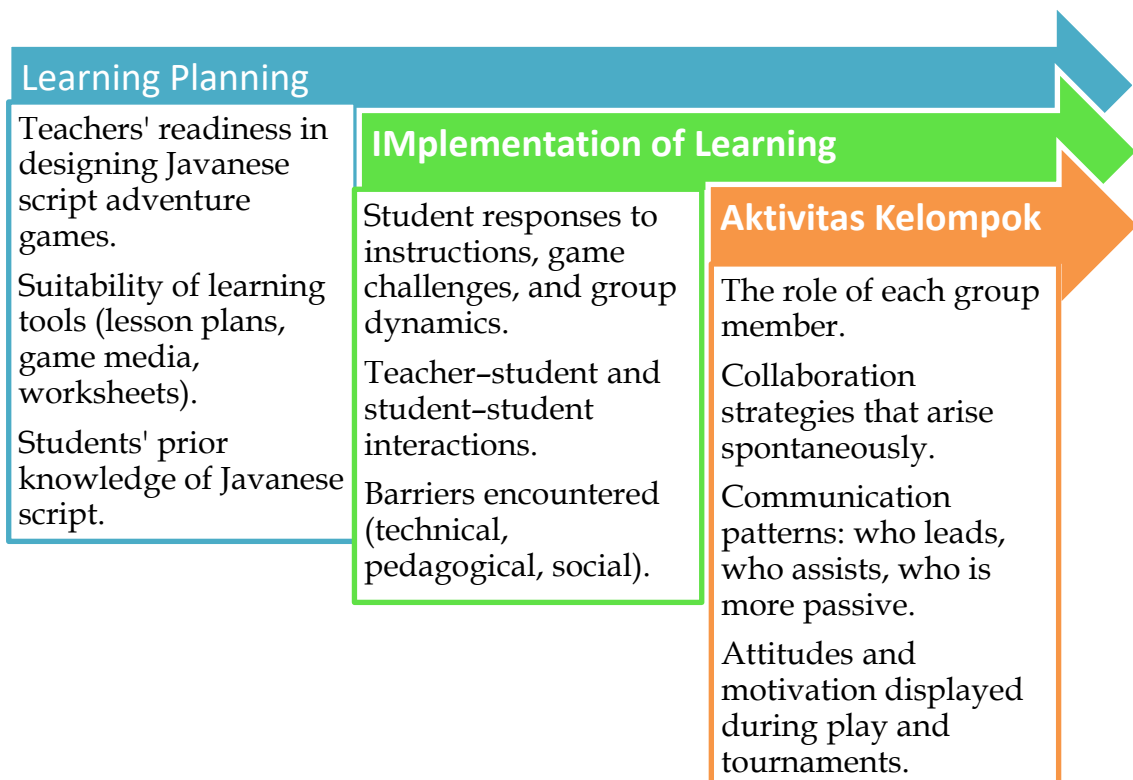


Figure 1. Aspect of Implementation

METHODOLOGY

The type of research conducted is qualitative research with a phenomenological approach. This study will describe the conditions in Javanese letters learning using a script adventure game in the team game tournament (TGT) type of cooperative learning method. This research was conducted in class IV Al Jazari at Muhammadiyah Sopen Elementary School in Yogyakarta, DIY province. This research was conducted in the odd semester of the 2025/2026 academic year. The research subjects were selected based on purposive consideration.

In this study, data collection was carried out through in-depth observation by observing the process of teachers in implementing learning using the TGT type of cooperative learning, observing student interactions while playing, enthusiasm, obstacles and student strategies in reading Javanese script. In addition, the data was supplemented with documentation in the form of photos of activities, assignment sheets and student learning outcomes.

RESEARCH RESULT

The results of research conducted in class IV Aljazari at Muhammadiyah Sopen Elementary School explain several topics studied in this qualitative research. Namely, the implementation of games using the TGT type of cooperative learning method in learning to read Javanese script.

Several aspects were examined, including the preparation of learning tools, the readiness of teachers in designing games, students' prior knowledge, responses and interactions, as well as an overview of the learning process, obstacles that arose, how teachers assessed the process and results, changes in students' attitudes and interest in learning to read Javanese script, and group activities. Data was obtained from observations in the form of anecdotal notes about events during the learning process and several photographs as documentation of the learning process.

Description of the Learning Process

The learning process begins with the teacher opening the session with a greeting and setting the tone for the class. After that, the teacher delivers the material and instructions for the game to be played. The students are then divided into groups by drawing lots using a wheel of names to ensure heterogeneity or randomness. After the students are grouped, they receive worksheets as game guides, and the teacher reinforces the game instructions. Once they understand, the students search in their scattered groups for word collections to be made into sentences. The word collections are based on their position in the sentence structure. After the students obtain the three structures, they return to their groups to correct the words they have collected. If there are duplicate collections, the students must find another group to exchange with. Once all groups have completed the word collections, the students begin working on the game tasks as guided by the LKPD. In the LKPD, students are asked to arrange the collected syllables into complete words and sentences by cutting and pasting them onto the group's LKPD sheet. After the group's LKPD is completed, students take a formative test by copying the group's LKPD onto their individual LKPD while writing down the pronunciation or how to read the sentences that have been arranged. The fastest group to complete the task is the winner and will receive an award from the teacher. After all activities are completed, then students and teachers reflected on the day's activities.

Group Activities

Initially, teachers were not able to maximise their lesson planning because they were still unfamiliar with using the letter adventure game, thus exceeding the expected time target for preparing the game. Similarly, many students still did not understand how to play the game, so it was not carried out as planned. During this meeting, many students asked about the meaning of Javanese words that they did not understand. These words were *tiyang*, which means person; *Jawi*, which is the polite form of the word *Jawa*; and *mulang*, which means to teach. The students did not understand the meaning of these three words. Another obstacle was when searching for Javanese character sets, each group had to obtain 3 different character sets, but because there was no proper division of group tasks, one group could obtain the same set of words, so they had to announce to all the other groups to exchange them. The advantage of this tournament game is that it brings out the students' ability to coordinate with their friends. Then there was one group that was able to display a different method from their friends in overcoming the problem of mixed words. The group led by Mahran overcame this by transliterating the word collection before arranging it into a complete sentence.

This group was able to work well together, with all members actively participating in the transcription activity. This made it easier for the group to compose complete sentences and become the first winner in this tournament. The group that came in second place, led by Gilang, had a different strategy, which was to mark similar words with three symbols to group subject words with a circle, predicate or person names with a triangle, and object or thing words with a tick. This enabled them to work faster than the other groups in forming sentences, allowing them to achieve second place in the tournament. The third group employed a different strategy, which was to first cut up all the syllables and then reassemble them into words and sentences. This took longer. Meanwhile, the other groups seemed to lack strategy or cohesion in their work. Generally, only one or two students worked, while the rest of their group members mostly sat idly by. This resulted in longer sentence construction times due to a lack of strategy and team coordination. There was one group in particular with one bright student, one average student and one slightly slower student. The three of them were unable to work together, so only the bright student did the work while the other two just observed. The teacher intervened by reminding the bright student to guide and share the tasks with the other group members. Another group that used the same method, namely cutting out each syllable without giving the syllable sound and immediately arranging them into sentences, experienced difficulties because some syllables were missing, making it difficult to form complete sentences.

Group work completion rate = $540/6 \times 100\%$

Group work competition rate = 90%

Group work completion rate is high

Student Interest and Attitude Change

In general, before the implementation of learning through games, students' interest in learning Javanese script was quite low because learning to read and write Javanese script was only part of the local curriculum. As a result, students' interest and motivation seemed to be limited to simply following along. This was evident in the students' constant requests for permission to look at examples of the script in the module in order to complete the exercises given by the teacher. Without looking at the module, many students were unable to complete the exercises, resulting in many unfinished exercises or careless answers.

After the implementation of games that challenged students, their enthusiasm increased, especially when done in groups so that students could complement each other in remembering the shapes and sounds of the script while working. Students who were usually passive became more active in participating in group discussions to complete the challenges in the games. More proficient students were also able to provide creative ideas in completing the challenges and even led the discussions. The two fastest groups had effective strategies in completing the challenges because of the creative ideas of one student, which were then followed by other students in the group.

Some did this by first converting the letters to sounds, while others marked the words to group them into subjects, predicates, and objects. This proved to be an effective way to complete the game challenge more quickly. The other players used the strategy instructed by the teacher at the beginning of the game, which was to find and then cut out the letters of each syllable and then arrange them together with their group. Meanwhile, one group seemed unable to collaborate within the group. This group was the most heterogeneous, consisting of intelligent students, students with average abilities, and slow learners. The intelligent student was unable to delegate tasks or share tasks with the other two students, so the other two students just watched their friend passively. The intelligent student did all the work. In this case, the teacher had advised the group to share tasks so that they could work faster.

However, there were still two students who did not show any increase in interest and remained passive in the learning process. These two students came from ethnic groups outside Java and had average cognitive abilities. From the questions and answers between the teacher and the students concerned, it was found that the reason for their lack of motivation was that they already had the assumption that they were not Javanese and felt that they did not need to learn Javanese script. In this case, the teacher takes an individual approach to correct the student's understanding.

$$\text{Formatif average} = \frac{1470}{18} = 81.7$$

Frequency	Stem &	Leaf
1.00	Extremes	(=<10)
2.00	5 .	00
.00	6 .	
1.00	7 .	0
3.00	8 .	000
6.00	9 .	000055
5.00	10 .	00000
Stem width:		10
Each leaf:		1 case(s)

Based on the data above, it can be seen that the average score of the formative test after implementing the TGT technique was 81.7, with most scores ranging from 90 to 95, followed by 100. However, there were still three children with scores below 80. This means that the success rate of using the TGT technique reached 83%. This means that this learning technique using games can be recommended for use in learning to read Javanese script.

DISCUSSION

One of the obstacles encountered by teachers and students in the field is when one group is unable to cooperate with each other, resulting in the concentration of group work on one intelligent student.

The intelligent student is unable to collaborate or lead his friends in dividing tasks. Another obstacle encountered in this learning process is that the teacher's instructions are still not well understood by the students, so that students often ask questions about what they need to do. In addition, there is a lack of initiative among students in solving their own group problems, so that they often ask for help or ask the teacher questions, even about how to divide group work tasks. In addition to the above obstacles, there is also the obstacle of students' lack of understanding of Javanese vocabulary, so that when they encounter new vocabulary, students often ask about its meaning. This also hinders students in constructing good and correct sentences. Another obstacle is the incompleteness of TGT syntax in the preparation of lessons by teachers and the limited time available for implementing the TGT type of cooperative learning model. As a result, one TGT cycle requires two meetings. This is also due to the fact that students are still unfamiliar with or do not yet understand the learning activities they will be doing, so they need more time to prepare for the lessons.

Another aspect that needs to be improved in the TGT cooperative learning process using this Javanese script adventure game is the need to create a separate formative test that is different from the LKPD in the game so that it can measure the level of individual student understanding before and after the game. The individual LKPD used is only able to measure the ability to write the script, not the students' reading ability.

CONCLUSIONS AND RECOMMENDATIONS

The teaching of early Javanese script reading using the TGT Cooperative Learning model is quite effective in increasing interest and encouraging early Javanese script reading, namely memorising the forms and sounds of Javanese script for students, because learning in the form of games is in line with the developmental psychology of children who still enjoy playing. The game incorporates values of collaboration, innovation, problem solving, and challenge, which can increase student motivation in learning. This can be seen from the results of the formative test, in which 83% of students were able to achieve the minimum passing grade. Thus, learning to read Javanese script using the TGT technique can be recommended for use in other places with some adjustments according to the conditions in each environment.

ADVANCED RESEARCH

Teachers assess students based on the results of group worksheets and individual worksheets for each student. Teachers also provide reinforcement to students at the end of the lesson by leading a reflection based on the teacher's anecdotal notes. However, this was not able to describe the abilities of each individual student in terms of cognitive improvement. Therefore, the assessment tools should be separated from the worksheets that can be used to test students' level of understanding after playing the Javanese script adventure game because the worksheets used by teachers were not able to test students' level of understanding of their individual Javanese script reading abilities.

Therefore, further processes and improvements are needed in the Javanese script reading learning process using the TGT technique.

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