The Effect of Using Crossword Puzzle Model on Learning Interest in Indonesian Learning Based on Students' Literacy

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Abstract

Learning Model requires coaching and developing students' thinking skills, especially in the cognitive domain to combine playing with learning. Students are engaged in learning using the crossword puzzle method, both mentally and physically. The purpose of this study is to analyze the impact of the crossword puzzle model on students' interest to learn Indonesian based on how well students can read. This study employed a quasi-experimental experimental design. All 35 samples of third-grade pupils served as the study's subjects. Data collection techniques are observation, questionnaire and test and documentation. The data analysis techniques used is descriptive data analysis. According to research findings, adopting the crossword puzzle approach had an impact on students' enthusiasm in learning Indonesian based on literacy. Students' interest in learning Indonesian using crossword puzzle media was higher with an average score of 91.55 if compared with the control class that did not use crossword puzzle media, which was 64.23. It can be concluded that there is a significant effect of crossword puzzle media on students' interest in learning Indonesian. The implication of this study is in available for elementary schools in implementing learning with crossword puzzles, carried out and adapted to the abilities and conditions of students.

Keywords: Crossword Puzzle Model, Indonesia learning, students' interest, students' literacy.

1. INTRODUCTION

Human life is inextricably linked to Indonesian culture. The social nature of humans prevents them from existing in isolation. There are benefits and drawbacks to being a human, thus everyone requires and benefits from having the other. People are more likely to know one other, assist each other, and engage when there are variances in their abilities and requirements (Sasabone & Jubhari, 2021; Sujarwo et al., 2019; Sukmawati & Sabillah, 2020). In classroom learning and communication, language links human connection (Latifah, 2017; Parker & Bickmore, 2020). In life, Humans and their interactions with other humans are inextricably linked and with their environment. From that interaction there is an exchange of
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information or ideas between one another (Aswat et al., 2022; Bradley-Dorsey et al., 2022). The results of these interactions can be a lesson for others humans. And this will continue until the man dies. With the use of language can be crucial in all activities, especially in terms of thinking, reasoning and speaking. Language also has a central role in the process of intellectual/learning, learning process, social, emotional development and is a supporter of success in learning all fields of study Indonesian is a mandatory lesson at all levels of education, ranging from elementary school to lectures (Francisco Jareño & Lagos, 2014; Lee & Wallace, 2017; Muhammad et al., 2022). The reality that occurs in the field is that Indonesian subjects are subject to less respected by students. Indonesian language is learning language skills, namely skills that are emphasized on receptive skills and productive skills. Indonesian language learning in elementary school grade I begins with receptive learning (Ramadhania, 2022; Riynaldiy et al., 2019). Thus, productive skills can also be improved. There are four facets of language proficiency, including language teaching: (1) listening skills, (2) speaking skills, (3) reading skills, (4) writing skills.

Therefore, It can be challenging for teachers to give successful language learning, thus the correct tactics and strategies are required (Amjah, 2014; Syofiani et al., 2018). Learning language skills in schools does not only emphasize the theoretical aspect, but how to make students able to use language as it functions, namely as a tool to communicate how their teachers might facilitate (Gregory et al., 2016; Payne, A. A., & Welch, 2015). This fact can be seen that in the process of language learning, certain language skills can be linked to other language skills. The linking of language skills in question does not always involve all four language skills at once, but can only combine two language skills as long as the language activities carried out are meaningful. The writing ability of elementary school students is still low, as is the ability to read. One of the causes of the low reading ability of the students of SD Inpres Sero Gowa is that so far students have received more memorization than practice, including composing. The weakness of teaching Indonesian lies in the emphasis on speaking about the language rather than practicing using the language. This is one of the causes of Indonesian language learning not achieving the goal to be applied in everyday life (Nurjannah et al., 2019; Syofiani et al., 2018). The ability to communicate in many ways, including reading, speaking, listening, and writing depending on one's objectives is known as literacy learning (Hewi & Šahleh, 2020; Kim et al., 2021).

To make learning process runs well needed on interest learning model/strategies namely Crossword Puzzle. Crossword Puzzle model is one of the strategies derived from active learning strategies, the challenges and its comfortable games (Guo et al., 2020; Xinyue et al., 2020). It is conducted in order for students to attain good learning outcomes that are appropriate for their individual qualities, active learning aims to maximize the use of all of their potential (Agarwal et al., 2020; Ritonga et al., 2021). Additionally, the goal of active learning is to maintain students' attention on the learning process. Students will therefore feel more challenged when working on issues presented by the teacher after utilizing this crossword game. Additionally, because this might reduce pupils' boredom, they will comprehend the content that has been presented better than who only answer questions provided with a multiple-choice problem model or description (Kalkan et al., 2022; Nurhayati et al., 2019; Rohman et al., 2021). This is because by utilizing this medium, kids learn to recall, comprehend, and match words to the name and purpose of the item (Sabillah & Sukmawati, 2020; Sujarwo et al., 2019). Crossword puzzles are commonly found in newspapers and magazines. However, they have not yet been well explored as a learning tool in Indonesia subject especially in Elementary school (Ritonga et al., 2021; Samsuddin et al., 2021). Some previous studies found that the students stated that The puzzles tested their understanding of the topics they needed to learn in the lesson as well as what they needed to learn in the lesson (Kalkan et al., 2022). This was supported by research, which revealed that
using crossword puzzles to teach maharah qira'ah had surpassed HOTS standards and demonstrated that learning is student-centered. Using crossword puzzles also requires students to be creative and innovative, and doing crossword puzzles that correspond to the qira'ah text being taught helps students develop their critical and deep thinking skills. According to earlier studies, a statistically significant positive link between student collaborative learning and crossword puzzle implementation scores was discovered \((r = .506, p .01)\). The results demonstrated that Plickers and crossword puzzles lead to better enhanced student engagement when they were implemented effectively (Mshayisa, 2020).

Based on information from the third grade teacher of SD Inpres Sero Gowa that students often feel bored in learning Indonesian and the average score obtained from the test is still relatively low. The value of the KKM provisions for Indonesian subjects is 70, but the average value of third grade students only reaches 60%. This is because the delivery of material does not vary and tends to be boring so that students are not interested and feel bored with Indonesian lessons. To anticipate this, teachers as the foremost base in the world of education are required to try to change this one. In addition to the use of media in learning, literacy learning also plays an important role in the learning process in the classroom, especially to increase student interest. Some topics can be measured by a number of validated methods to assess student interest in learning (Jack & Lin, 2017; Swirski et al., 2018). By using that learning model as a support to stimulate language of students’ literacy learning, literacy understanding, literacy activities (Lim et al., 2021; Nahdi & Yunitasari, 2019; Saal & Dowell, 2014). One of the suitable learning methods to increase students’ interest in learning is Crossword Puzzle. Crossword Puzzle learning can increase students’ interest in learning because in carrying out learning it is accompanied by literacy-based play. Literacy is fundamentally (de Roock, 2021; Drewry et al., 2019). Base on those problem and result from previous studies the aim of study is analyze the effect of using the Crossword Puzzle Model on students’ interest in learning Indonesian based on students’ literacy in the third grade students of SD Inpres Sero Gowa. In learning Indonesian and the use of media in learning, literacy learning also plays an important role in the learning process in the classroom, especially to increase student interest in learning Indonesia subject.

2. METHODS

This study employed an experimental research methodology. The experimental research approach allows researchers to purposely cause two different things in order to identify a causal relationship between them, reducing or setting aside other disturbing factors (Cohen et al., 2017; Creswell, 2021). The population is the entire object of research, whether in the form of humans, events, or symptoms that occur (Jonbekova, 2020; Mardiana-Jansar & Hanafiah, 2020). Based on the opinion above, the population is defined as the whole being studied (object of research). In this case, the object of research is the third grade students of SD Inpres Sero Gowa. And sample in this study using the technique of saturated sample or total sample, namely the entire population is sampled. So the samples in this study were students from class III SD Inpres Sero Gowa totaling 35 students.

When conducting a study to gather data, the research instrument is a crucial element (Hanna et al., 2019; Wyatt, 2018). A variety of tools can be employed to measure, gather data, and gather empirical data to determine the values of the variables under study. Consequently, the research tool needs to be compatible with the factors being examined. Researchers employed a questionnaire to acquire information about the influence of the Crossword Puzzle media to raise the learning interest of primary school kids. In addition to information obtained from observations and documentation pertinent to the subject. The number of questions or questionnaire is 15 items and the data sources are students of SD
Inpres Sero Gowa. The data collection technique that researchers will use in this study is a questionnaire about students’ interest in learning Indonesian without using literacy-based crossword puzzle learning and a questionnaire about interest in learning Indonesian using literacy-based crossword puzzle learning. While the results of learning Indonesian is done with a test. Data collection techniques are observation, questionnaire and test and documentation. Data analysis is used to examine the truth of the proposed hypothesis based on the variables studied. The data analysis techniques used in this research are descriptive data analysis namely quantitative data used to describe the characteristics of respondents which are presented in the form of the average (mean), the value that often appears (mode), the maximum value and the minimum value, as well as the frequency distribution of each sub-variable. Inferential data analysis was analyzed using the t-test formula to find out how much influence the use of the crossword puzzle learning strategy had on students’ interest in learning.

3. RESULTS AND DISCUSSION

Result
The Data analysis in this section described the students’ interest in learning Indonesian using a crossword puzzle (Variable X) and interest in learning Indonesian (Variable Y). The presentation of the complete data is show in Table 1.

Table 1. The students’ Interest in Learning Indonesian for Control Class

<table>
<thead>
<tr>
<th>No</th>
<th>Score</th>
<th>Qualification</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>64-100</td>
<td>Very high</td>
<td>14</td>
<td>42.85%</td>
</tr>
<tr>
<td>2</td>
<td>48-63</td>
<td>High</td>
<td>18</td>
<td>52.38%</td>
</tr>
<tr>
<td>3</td>
<td>32-47</td>
<td>Moderate</td>
<td>3</td>
<td>4.76%</td>
</tr>
<tr>
<td>4</td>
<td>16-31</td>
<td>Less</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>5</td>
<td>0-15</td>
<td>Very less</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

Based on the Table 1, it can be seen that the students’ interest in learning Indonesian in the control class of SD Inpres Sero Gowa was (1) Asking to learn Indonesian language subjects for third grade students, which was 42.85% or with a total of 14 students who had an interest in learning Indonesian with very high category, (2) Asked to learn Indonesian language subjects for third grade students, which was 52.38% or with a total of 18 students who had an interest in learning Indonesian with a high category, (3) Asked to learn Indonesian language subjects to grade students III, namely 4.76% or with 3 students who had an interest in learning Indonesian in the medium category, (4) While at the percentage of 0%
or no student was less interested in learning Indonesian can be seen in the graph as shown in Figure 1. In accordance with the graph as shown in Figure 1, the frequency distribution of interest in learning Indonesian in the control class shows that the score is 64-100 with a very high category on the interest in learning Indonesian subjects in the control class and the value was 48-63 with a high category on the interest in learning Indonesian language subjects.

While the value of 32-47 with a moderate category of student interest in Indonesian subjects in the control class. In addition to the frequency distribution of interest in learning Indonesian in the control class. The frequency distribution of interest in learning Indonesian in the experimental class is shown in Table 2.

**Table 2. Frequency Distribution of Interest in Learning Indonesian for Experiment Class**

<table>
<thead>
<tr>
<th>No</th>
<th>Score</th>
<th>Qualification</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>64-100</td>
<td>Very high</td>
<td>33</td>
<td>95%</td>
</tr>
<tr>
<td>2</td>
<td>48-63</td>
<td>High</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>3</td>
<td>32-47</td>
<td>Moderate</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>16-31</td>
<td>Not enough</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>5</td>
<td>0-15</td>
<td>Very less</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total 20 100%

Based on Table 2, it can be seen that the interest in learning Indonesian in the experimental class of SD Inpres Sero Gowa by using crossword puzzles are (1) Students who had an interest in learning Indonesian was very high category with 33 students with a percentage of 95%, (2) Students who have an interest in learning Indonesian are in the high category with the number of students being 2 people with a percentage of 5%, (3) while students who have an interest in learning Indonesian are in the medium, less and very poor categories, namely 0 or 0% percentage. It can be seen in Figure 2.

![Frequency Distribution of Indonesian Language Learning Interest for Experimental Class](image)

**Figure 2. Frequency Distribution of Indonesian Language Learning Interest for Experimental Class**

In accordance with Figure 2 on the frequency distribution of interest in learning Indonesian in the Experimental class, it can be seen that the score was 64-100 with a very high category for the interest in learning Indonesian language subjects in the experimental class and the value was 48-63 with a high category for the interest in learning Indonesian language subjects. Indonesia in the experimental class as shown in Table 3.

**Table 3. Experiment Class and Control Class**

<table>
<thead>
<tr>
<th>No.</th>
<th>Questionnaire</th>
<th>Interest to learn</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Control class</td>
<td>64.23</td>
</tr>
<tr>
<td>2</td>
<td>Experiment Class</td>
<td>91.55</td>
</tr>
<tr>
<td></td>
<td><strong>Percentage (%)</strong></td>
<td><strong>42.53</strong></td>
</tr>
</tbody>
</table>
Based on Table 3, the results of interest in learning in grade III students of SD Inpres Sero Gowa before treatment, where the mean (average) score of the results of interest in learning for grade III students before using Crossword puzzle learning, which is 64.23 is still relatively low. Meanwhile, the mean (average) score of students' interest in learning after using crossword puzzle learning is 91.53. This shows that students' interest in learning at this stage is quite high. During the research there were changes. These changes can be seen in the increase in the presentation value of the average value in the experimental class and control class, which is 42.53. It can be seen in Figure 3.

![Figure 3. Experiment Class and Control Class](image)

This study measured the effect of learning, namely crossword puzzles on interest in learning Indonesian. The use of crossword puzzle learning is expected to be able to make students more interested in learning Indonesian. The effect of crossword puzzle learning can be seen from the results of the learning interest questionnaire distributed to the experimental class and the control class. High student influence will create a more effective learning so that student interest in learning is further enhanced. The use of crossword puzzle learning can be said to be influential in learning if it can optimize students' interest in learning Indonesian when compared to conventional learning. The comparison is that the teacher only uses direct learning without being accompanied by direction and delivery of special objectives in learning activities. In addition, teachers have not implemented learning that can arouse students' interest in learning.

**The results of the inferential analysis of the T-value test**

To determine the magnitude of the effect of the use of Crossword puzzle learning on the interest in learning Indonesian in the third grade students of SD Inpres Sero Gowa, a T-score test formulation was used. The results of inferential statistical analysis using the t-test formula, it can be seen that the t-count value is 5.52 with a frequency (dk.) of 40 – 1 = 39, at a significant level of 0.05 obtained t-table = 1.68488. This was obtained t-count > t-table or 5.52 > 1.68488, it can be concluded that H0 is rejected and H1 is accepted, which means that crossword puzzle learning has an effect on learning interest and Indonesian language learning outcomes in third grade students of SD Inpres Sero Gowa.

**Discussions**

In this section, the results of study found during the research will be described. The results in question are conclusions drawn based on the data collected and the data analysis that has been carried out. The data collection model used a questionnaire technique. The value of the questionnaire on the interest in learning Indonesian for the third grade students of SD Inpres Gowa through the provision of questionnaires in the experimental class and control class showed a significant increase, as seen from the average value of student interest in
learning in the control class was 64.23 while in the experimental class was 91.55. Moreover, the students’ interest in learning Indonesian after using crossword puzzle learning have a better interest in learning than before using crossword puzzle model learning. This can also be seen from the comparison of the average percentage results in the experimental class and the control class, which was 42.53. From the number of comparisons, it is clear that there is an increase in the average results of giving questionnaires to a class that was experimental and another that was not. Generally speaking, pupils reported a rise in their interest in science as well as some knowledge advances. Additionally, students stated that they felt the curriculum helped them to engage in science. Most participants thought the crossword puzzle was a good exam question. It enhances pupils’ performance, critical thinking, and memory while being enjoyable (Agarwal et al., 2020; Syofiani et al., 2018).

Some previous studies results stated that the students encourage the use of puzzles so that classes are fun, learning is made easier, students' motivation is increased, and puzzles help to make material memorable (Kalkan et al., 2022). This study was reinforced by another study that revealed employing puzzles will be introduced to other educators as a beneficial source of inspiration for their instruction (Milkova et al., 2015). In accordance with prior research, crossword puzzles have been shown to be useful in helping nursing students learn the pharmacology of epilepsy and how to spell AEDs correctly. To increase nursing students' understanding of the pharmacology of epilepsy, educators may think about employing crossword puzzles as active learning aids (Shawahna & Jaber, 2020). Crossword puzzles can be used to supplement scientific instruction in elementary schools in an effort to maximize pupils' conceptual knowledge and critical thinking abilities (Nurhayati et al., 2019; Wiantara et al., 2020).

Based on the results of this study indicated that there is an effect of crossword puzzle media on students' interest and cognitive learning outcomes for the classification of living things. By demonstrating Students' capacity to comprehend physics concepts is significantly impacted by the use of discovery learning models with blended learning techniques assisted by Crossword Puzzle media. According to the research's overall findings, which show that using physics concepts improves student learning outcomes (Bokingo et al., 2022; Raehan et al., 2020). The students reported that the crosswords covered the material they needed to learn in the session, that they had gained information that was relevant, and that they had a good understanding of the subjects they needed to study (Kalkan et al., 2022; Syofiani et al., 2018). The crossword puzzle media can have a positive and significant influence on students' interest because when answering questions on Indonesian language subjects. Students will train in their creativity to answer students' curiosity about answers that have not been found. This makes students able to eliminate boredom because students have to think about the answers until they find all the answers (Nasution et al., 2020; Rohman et al., 2021). The influence of the crossword puzzle media as previously mentioned shows student activities that involve students in the educational process and display an eagerness to learn. Interest is a state that develops when a person connects a situation’s traits or short-term significance to his or her own goals or wants (Budiarti et al., 2022; Feldman et al., 2014). Making it easier for students to remember the learning material delivered by the teacher and facilitates the process of transferring knowledge to students. This is in accordance with the theory that interest in learning is the impulses from within students psychologically in learning something with full awareness, calm and discipline so that it causes individuals to be active and happy to do it. If compared with the results of this study, the researchers found that the use of Crossword Puzzle model can affect the students’ literacy. Language literacy model can increase the students' interest in learning because in carrying out learning, it is accompanied the puzzle learning (Feldman et al., 2014; Milkova et al., 2015). Literacy instruction is a crucial component of the educational process in the classroom, particularly when it comes to pique
students' interest in the study of Indonesia. By using the literacy-based Crossword Puzzle model, students felt happy because it is almost similar to playing words or guessing words, indirectly students will learn with an interesting, creative and innovative learning process (Agarwal et al., 2020; Budiarti et al., 2022; Kalkan et al., 2022). This is interesting learning model, facilitating the construction of the students’ literacy knowledge, and convenience measure students’ understanding using crossword puzzles.

This study is created the aspects of language literacy namely the ability to speak, that is language skill, especially the ability of the students’ literacy in language, literacy involves the some skills, both reading and speaking for the students in Indonesia subject (Saal & Dowell, 2014; Shahzadi, 2022; Thibaut & Curwood, 2018). By using the literacy-based Crossword Puzzle model, students feel happy because it is almost similar to playing words or guessing words, indirectly students will learn with an interesting, creative and innovative learning process as the impact of science development in this era especially in teaching-learning Indonesian subject for the third-grade students of SD Inpres Gowa. It is expected that more extensive research in this field will be done.

4. CONCLUSION

In implementing the crossword puzzle model can be positive effect on the students’ interest in learning Indonesian subject toward the students’ literacy especially language literacy. Teachers are able to attract the students' interest based on literacy in learning Indonesian. This can be proven by using crossword puzzle media is higher interest if compared to the control class that does not use crossword puzzle media for the students in learning Indonesian subject. Hence, there is a significant effect of crossword puzzle media on students' interest based on literacy in learning Indonesian at class III SD Inpres Sero Gowa.

5. REFERENCES


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