The Impact of Implementation of Crossword Puzzle Model for Students' Learning Outcomes in Indonesia Subject

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Abstract. Well-designed learning media will be more assist students in achieving high learning outcomes. However, the facts on the ground show that teachers have not optimally used instructional media so that students tend to get low learning outcomes. This study aims to determine the effect of using the Crossword Puzzle Model on students' learning outcomes in learning Indonesian. This research used an experimental study with a quasi-experimental method which was analyzed with distributive analysis and inferential analysis which aims to determine the effect of using the Crossword Puzzle model on learning outcomes of Indonesian language for the third grade students of SD Inpres Sero Gowa. The population in this study was all the third class and the sample in this study were 35 students of class III. The instrument for collecting data is carried out using statements that must be answered by respondents related to the questionnaire. The form of the questionnaire to measure students' learning outcomes is multiple choice. Technique Data analysis was used to examine the truth of the proposed hypothesis based on the variables studied, namely descriptive data analysis and inferential data analysis. Research result showed that there is an effect of using the crossword puzzle model on students' learning outcomes in learning Indonesian by obtained t-count > t-table or 5.52 > 1.68488, it found that H0 was rejected and H1 was accepted, which means that crossword puzzle learning has an effect on Indonesian language learning outcomes in third grade students of SD Inpres Sero Gowa. It can be concluded that there is a significant impact of crossword puzzle media on students' learning outcomes in learning Indonesian in class III SD Inpres Sero Gowa.

INTRODUCTION

Education is the spearhead for development civilization. Superior human resources will lead the nation to become advanced and competitive in the midst of globalization, but Indonesia is still experiencing obstacles in creating good quality education (Sujarwo et al., 2019; Sukmawati, Sabillah, 2020 ; Akhiruddin, et al., 2021; Akhiruddin, et al., 2022). The education quality is a direct consequence of a change and development in various aspects of life. The demand for the quality of education is the most important requirement to be able to answer the challenges of change and development (Nurhikmah H et al., 2021). One of the problems faced in the world of education today is that the learning process is still weak. Learning is not enough just by listening and see but have to do other activities including, reading, asking, answering, arguing, doing assignments, drawing, communicating (Sasabone et al., 2022), presenting, discussing, concluding, and utilizing equipment. All are done by human especially the learners.

Indonesian cannot be detached from human life. Humans as social beings cannot live without other humans. Every human being is gifted with advantages and disadvantages. Moreover, each other always needs and complements each other. These differences in abilities and needs encourage people to get to know each other, help each other, and interact (Sujarwo; Sukmawati;Yahrif, 2019; Akhiruddin; et al., 2019; Sukmawati, Hasnani, 2022; Aswat et al., 2022). Through language can interact with each other because language is the human's creation. With language, humans can express ideas, opinions (Sujarwo, et al., 2022), Language unites the human interaction in the form of communication and in classroom learning (Latifah, 2017).

Indonesian is a compulsory subject at all levels of education, from elementary school to lectures. The reality on the ground, Indonesian language subjects are not appreciated by students (Ahmad Riynaldiy, Rizki Aldea, Syafrisya Fazhari, M.Fernanda, 2019). Indonesian is a language skill learning, namely skills that are emphasized on receptive skills and productive skills. Indonesian language learning in grade 1 elementary school begins with receptive learning (Ramadhania, 2022).

Hence, learning language skills in schools does not only emphasize the theoretical aspects, but how to make students able to use language as it functions, namely as a tool to communicate (Syofiani et al., 2018). This teh real things can be seen that in the process of language learning, certain language skills can be associated with other language skills (Yuriatson Jubhari, Rosmiaty, 2022; Sitti Nurjannah, 2022). The linkage 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 (Rezeki, Ria, Sujarwo & Ibrahim, 2022).

To recognize 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 (Syofiani et al., 2018).

Educators have used crossword puzzles as teaching tools since 1929 (Schafer & Behymer, 1992 as cited in (Raines, 2010). Most people think of a crossword clue as simply the definition of a word that is the answer. Sometimes; However, there is another kind of relationship between clues and words in crossword puzzles (Raines, 2010). Crossword Puzzle is one of the strategies derived from active learning strategies (Agarwal et al., 2020); (Ritonga et al., 2021).

Active learning is intended to optimize the use of all the potential that students have, so that they can achieve satisfactory learning outcomes according to their personal characteristics. In addition, active learning is also intended to keep students' attention focused on the learning process (Astutik, F. (2014). Therefore, by using this crossword game, students will feel more challenged in working on problems provided by the teacher. In addition , students will better understand the material that has been taught, because this can overcome the boredom among students who only answer questions provided with a multiple-choice problem model or description (Nurhayati et al., 2019; Shawahna & Jaber, 2020; Rohman et al., 2021; Kalkan, N., Güler, S., Bulut, H., & Ay, 2022). This is because in using this media students are trained to remember, understand, and match words according to the name and function of the tool (Ritonga et al., 2021).

Crossword puzzles are commonly found in newspapers and magazines (Gaikwad & Tankhiwale, 2012). However, they have not yet been well explored as a learning tool in Indonesia subject especially in Elementary school.

Some previous studies found that The students stated that the puzzles included what they needed to learn in the lesson, that they had learned useful information and that they understood the topics they needed to learn in the lesson (Kalkan, N., Güler, S., Bulut, H., & Ay, 2022). Supported by research results showed that the average student activity is 100% with very strong criteria. Based on the analysis of student achievement in the first cycle with an average score of 80.29, completeness 82.61%, and in the second cycle 83.48 with 91.30% completeness, it can be concluded that the application of multimedia crossword puzzles in science education supports learning process, learning becomes better and improves student learning outcomes, especially on the material of the digestive system (Marlina et al., 2021). In line with other study found that a statistically positive relationship was found between student collaborative learning and crossword puzzle implementation scores (r = .506, p < .01). The findings demonstrated that when implemented effectively, Plickers and crossword puzzles contributed to greater enhanced student engagement (Mshayisa, 2020).

Moreover, the advantages of crossword puzzles is to increase the activity and learning outcomes of students because in completing crossword puzzles a clear, relaxed and calm state of mind will make the brain's memory strong, so that memory also increases. Apart from that, this crossword game makes us think and also seek and find answers in a fun but sometimes confusing way to solve these puzzles.

Based on preliminary study from the third-grade teacher of SD Inpres Sero Gowa

show that students often feel bored in learning Indonesian and the average score obtained from the test is still relatively low. The value of the Minimum Completeness Criteria provisions for Indonesian subjects is 70, but the average grade III students only reach 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 language lessons.

To anticipate some cases above, the teachers as the foremost base in the world of education are required to try to change all of them. One of solution was given by the researchers by using media in learning, learning media also plays an important role in the learning process in the classroom, especially to increase students' learning outcomes in learning Indonesia subject. One of the suitable learning methods to increase students' learning outcomes in learning Indonesia is Crossword Puzzle model. Model of crossword puzzles can increase students' learning outcomes in learning Indonesia because in carrying out learning it is accompanied by learning media. By using the 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.

Based on description above, the researchers are interested in conducting the research entitle the impact of implementation of crossword puzzle model for students' learning outcomes in indonesia subject.

The aim of this study is to investigate the impact of implementation of crossword puzzle model for students' learning outcomes in indonesia subject at the third-grade students of SD Inpres Sero Gowa.

RESEARCH METHODS

The type of research used in this research is experimental research. The experimental research method (Cohen et al., 2017; Creswell, 2021) is a way to find a causal relationship between two factors that are deliberately caused by researchers by eliminating or reducing or setting aside other disturbing factors.

The population is the entire object of research, whether in the form of humans, events, or symptoms that occur (Wilson & Abibulaeva, 2017). Based on the above opinion, 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.

Sampling 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.

Instrument study is a tool for researchers in collecting data (Kumar, 2011). The instruments used in this research are: Questionnaire. Questionnaire is an instrument for collecting data which is carried out using statements that must be answered by people related to the questionnaire.

The form of the questionnaire to measure student interest is multiple choice. Writer use Likert scale, with alternative answers to each question are A, B, C, D and E.

1. If the answer is A (strongly agree), the value given is 5

2. If the answer is B (agree), the value given is 4

3. If the answer is C (undecided), the score will be 3

4. If the answer is D (disagree), the value given is 2

5. if the answer is E (strongly disagree), the value given is 1

The number of questions or questionnaire questions is 15 pieces and the data sources are students of SD Inpres Sero Gowa class.

The data collection technique that researchers will use in this study is a questionnaire about students' learning outcomes in learning Indonesian without using crossword puzzle learning and a questionnaire about learning outcomes in learning Indonesian using crossword puzzle learning is used to determine the extent of students' learning outcomes in learning Indonesian. While the results of learning Indonesian is done with a test. Data collection techniques are Observation, Questionnaire and Test and Documentation.

Technique. 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

1. 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.

2. 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.

DISCUSSION

Descriptive Data Analysis Results

The results of descriptive data analysis in this section will describe the students' learning outcomes in learning Indonesian using a crossword puzzle (Variable X) and learning outcomes in learning Indonesian (Variable Y).

The students' learning outcomes on the use of the crossword puzzle learning model for third grade students of SD Inpres Sero Gowa involve the formulation of the problem as a follow-up to the results of data collection. Where it has been explained here that teachers must have a very large contribution to the success of learning in schools, teachers also play a very important role in helping the development of students to realize their life goals optimally.

Crossword Puzzle learning model (crossword puzzle) is one of the active learning intended to optimize the use of all the potential of students, so as to achieve satisfactory learning outcomes according to their personal characteristics. In addition, active learning is also intended to keep students' attention focused on the learning process.

Based on the previous discussion that interest is the desire to pay attention or do something. Interest is basically the acceptance of a relationship between oneself and something outside oneself. The stronger or closer the relationship, the greater the interest. Interest can be expressed through a statement that shows that students prefer one thing over another, it can also be proven through participation in an activity. Students who have an interest in certain subjects tend to give greater attention to certain subjects. If students realize that learning is a tool to achieve some goals that they consider important, and if students see that the results of their learning

experiences will bring progress to themselves, they are likely to be interested (and motivated) to learn them.

The analysis to find out how the effect of the application of the crossword puzzle learning model on students' interest in learning Indonesian was carried out using inferential statistical analysis using the t-test formula, it can be seen that the tcount value is 5.52 with a frequency (dk) of 40-1 = 39, at the level of significant 0.05 or 1.68488. Because t count > t table, the null hypothesis (Ho) is rejected and the alternative hypothesis (H1) is accepted.

Based on the results of research that has been carried out a comparison of the value of learning interest in the control class which is in the low category and the value of the experimental class is in the high category. So it can be concluded that the application of the crossword puzzle learning model affects the interest in learning Indonesian in the third grade students of SD Inpres Sero Gowa.

Description of Average Score Experiment Class and Control Class

No.	Questionnaire	Interest to learn
1	Control class	64.23
2	Experiment Class	91.55
Presentation (%)		**42.53**

Based ona description of the results of learning outcomes in learning in grade III students of SD Inpres Sero Gowa before treatment, where the mean (average) score of the results of learning outcomes in learning Indonesia for grade III students before using

Crossword puzzle learning, which is 64.23 is still relatively low. Meanwhile, the mean (average) score of students' learning outcomes after using crossword puzzle learning is 91.53. This shows that students' learning outcomes 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 the following graph:

Description of Average Score Experiment Class and Control Class for Students' Learning Outcomes
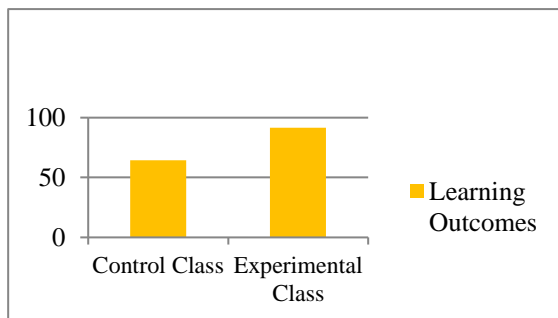
This study measures the effect of learning, namely crossword puzzles, on students' learning outcomes in learning Indonesian. The use of crossword puzzle learning is expected to be able to make students more interested in learning Indonesian. The effect of crossword puzzle learning can be seen from the results of the learning outcomes questionnaire distributed to the experimental class and the control class. High student influence will create a more effective learning so that student learning outcomes in learning Indonesia is further

enhanced. The use of crossword puzzle learning can be said to be influential in learning if it can optimize students' learning outcomes 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' learning outcomes in learning.

In this section, the results 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 sample of this study was all third grade students of SD Inpres Sero Gowa, totaling 35 students, where the sampling technique in this study was a saturated sample because the entire population was sampled.

The data collection model uses 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 results of learning outcomes in learning Indonesian after using crossword puzzle learning have increased in

learning than before using crossword puzzle learning. This can also be seen from the comparison of the average percentage results in the experimental class and the control class, which is 42.53. From the number of comparisons, it is clear that there is an increase in the average results of giving questionnaires to the experimental class and the control class. In general, students reported increases in learning outcomes and some knowledge gains. Students also reported they thought the program allowed them to engage in science. Majority of participants liked the crossword puzzle as an examination question. It improves memory power, performance and critical thinking of students with fun (Agarwal et al., 2020).

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 students' learning outcomes 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 tcount value is 5.52 with a frequency (dk).) of $40 - 1 = 39$, at a significant level of 0.05 obtained t-table = 1.68488. So obtained tcount > ttable 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 Indonesian language learning outcomes in third grade students of SD Inpres Sero Gowa.

The results of this study are relevance with the results of other studies which stated that the students stated that they recommend the use of puzzles, that lessons become entertaining, learning becomes easier, their motivation increases and that puzzles provide the memorability of information (Kalkan, N., Güler, S., Bulut, H., & Ay, 2022). This study was supported by the other found that using puzzles will be introduced their approach to other pedagogues as a good inspiration for their teaching (Milkova, E., Vymetalkova, D., & El-Hmoudova, 2015). In line with other study conveyed that crossword puzzles were effective in improving the learning of nursing students about the pharmacology of epilepsy and writing correct spelling of AEDs Educators should consider using crossword puzzles as active learning tools to improve knowledge of nursing students about the pharmacology of epilepsy (Shawahna & Jaber, 2020). This study was confirmed by the other study found that the application of discovery learning models with blended learning strategies assisted by crossword puzzle media has a significant effect on students' ability to understand physics concepts which is shown by proving the hypothesis test that the value of t table> t count which states that the lowest student learning outcomes (Bokingo et al., 2022). Then, large amount of information needed to function in today's chaotic and

rapidly changing healthcare environment, innovative teaching techniques are needed to strengthen learning outcomes and to generate enthusiasm and stimulate thinking processes focused on nursing studies (Raines, 2010).

Based on some results of study mentioned above, this is different with this finding stated that crossword puzzles can enhance an explicit teaching strategy and improve students' academic achievement and attitudes towards the Indonesian subject. Indonesia subject teachers and curriculum developers should adopt the two activity-based strategies for a good effect of the students' learning outcomes in Indonesia subject at class III SD Inpres Sero Gowa.

The media of crossword puzzles can have a positive and significant effect on students' learning outcomes because when answering questions on Indonesian subjects. This is where students will be trained 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 answers until they find all the answers.

The effect of crossword puzzles as previously mentioned shows student activities that involve students in the learning process and show that there was improvement in students' learning outcomes. Make it easier for students to remember the learning material delivered by the teacher and facilitate the process of transferring knowledge to students.

This is in accordance with the theory that learning outcomes in learning is a psychological impulse from within students in learning something with full awareness, calm and discipline so that individuals become active and happy to do so.

Students who used crossword puzzles showed greater fact retention, increased association concepts, and increased self-confidence. When working on crossword puzzles, students use critical thinking as they ponder clues and systematically narrow the range of possible answers. Solving clues often requires the use of higher levels of cognition, including the analysis, synthesis, and application of pre-existing knowledge.

CONCLUSION

Based on the results of research and discussion, it can be concluded that there is a significant effect of using crossword puzzle learning media on the students' learning outcomes in learning Indonesian in the third-grade students of SD Inpres Sero Gowa evidenced by the results of the independent sample t-test calculation on students' learning outcomes expressed in standard gain. The students' learning outcomes in learning Indonesian using crossword puzzle media was higher than the control class that did not use crossword puzzle media, which has a very high category on the students' learning outcomes in learning Indonesian subjects in the experimental class and a score has a high

category on the students' learning outcomes in learning Indonesian subjects in the experimental class. There is a significant influence of crossword puzzle media on students' learning outcomes in learning Indonesian at class III SD Inpres Sero Gowa.

As recommendation for (1) teachers Indonesian subjects can use the crossword puzzle model scientific approach to increase participation and learning outcomes so that learning can be maximized; (2) teachers should always try to find the right methods and strategies to foster responses, interest and create student participation in learning; and (3) teachers should try to innovate and change in learning.

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