

## Influence of Pictorial Crossword Puzzle Media Toward Vocabulary Mastery and Initial Writing Skills of Elementary School Students

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### Abstract

The research aims to analyze the influence of pictorial crossword puzzle media toward vocabulary mastery and initial writing skills of the 1<sup>st</sup> grade of elementary school in the academic year of 2017/2018. The subjects in this study were 38 student of 1<sup>st</sup> grade of SDN Sampangan 01 as an experiment class and 34 student of 1<sup>st</sup> grade of SDN Bendan Ngisor as an control class. The experimental design in this research was quasi-experimental design with nonequivalent control group design. The results of the research on vocabulary mastery in the experimental class obtained n-gain of 0.54 in moderate category, while in the control class obtained n-gain of 0.03 in low category. Furthermore, the results of the research on initial writing skills of the experimental class obtained n-gain of 0.35 in moderate category, while the control class obtained n-gain of 0.11 in low category. Thus, it can be concluded that the using of pictorial crossword puzzle media affect to vocabulary mastery and initial writing skills. From these results, it is suggest to teachers to use pictorial crossword puzzles media in learning process in order to enhance vocabulary mastery and initial writing skills.

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## INTRODUCTION

One of the lessons that must be developed since the beginning of primary school is language skills. According to Mulyati (2015), the language is a communication tool in the form of symbolic sound system generated human speech tool, the language consists of words or a collection of words. Language has a very important role in the intellectual, social, and emotional development of learners and it is a supporting of success in studying all of study areas.

Vocabulary is a very important aspect in the language mastery, the more vocabulary that memories, the more ideas and concepts that are controlled by someone. It is appropriate with the statement of Sedita (2005) that students' vocabulary knowledge is associated with academic success because students with many vocabularies can understand new ideas and concepts faster than students with limited vocabularies. In line with that opinion, Tarigan (2011) states that the quality of language skills of someone depends on the quantity and the quality of vocabulary that he/she has, the more vocabulary he/she has, the greater of the likelihood he/she are skilled in speaking. Therefore, it is necessary to have a solution that is expected to increase vocabulary mastery to support other language skills such as writing in the beginning of the child. With adequate vocabulary, the child will be easier in learning to write.

Writing is included in aspects of language skills that include aspects of listening, speaking, and reading. Initial writing lessons as one of the language skills must be mastered by primary school students especially at the beginning of their classes in 1<sup>st</sup> grade. Therefore, the position of initial writing lessons is very important in primary school. Mastery of the initial writing lessons becomes is one of the most important factors of successful in mastery of other subjects. Conversely, the failure in initial writing will be result in a failure to mastery other lessons. The development of the initial writing will be related to the mathematics ability because in studying mathematics involves the writing and taking

notes activities. Similarly, with other lessons, it requires the writing ability of children. For this reason, language development needs to be trained early. According to Awalya (2012) in her article states supported early childhood development benefits, it will be directed to build a feeling competent and confident in their skills.

Related to that matter, SDN Sampangan 01 Semarang was determined as the object of study. The results of interviews with the teachers of 1<sup>st</sup> grade showed that vocabulary mastery as well as the ability of the initial writing, is still less visible based on the score of the students' exercise task which is still low, even the students often do not understand what the teacher said because of vocabulary mastery not enough. It shows that the existence of obstacles in the learning process so that it can affect to the achievement of learning outcomes is not optimal. The obstacles that arise in the learning process because of the learning techniques used was not appropriate. As a result, learning activities just focus on teachers, students become passive in learning activities.

Response to this problem, an alternative media is needed to improve vocabulary mastery and students' writing skills. One of the alternative media that can be used is Pictorial Crossword Puzzle (PCP). According to Soeparno (1988), Crossword Puzzle is one of the language game forms. This game can be used as a technique to train the vocabulary mastery. By using the crossword puzzle, the learning process will be more interesting. Besides, crossword puzzle can be train students' writing skills. Crossword puzzle has many benefits, one of it benefits is to stimulate the freshness of the mind by sharpening the ability of the brain and add insight in the form of vocabulary treasury.

Orawiwnakul research (2013) found the effect of TTS on the acquisition of vocabulary. The results of this study indicate that the use of TTS has a positive effect on the acquisition of vocabulary. Keshta (2013) did a study that aimed to know the effectiveness of puzzles in developing the Palestinian tenth graders' vocabulary achievement and retention. Furthermore, Purwantoko (2010) and Januari (2014) in their article, also used crossword puzzle game as a

teaching tool which shows that there is an increase of teacher activity, student activity, and student learning outcome.

Another case by Davis, et al. (2009) shows that the use of crosswords as a medium of learning can give benefit some classes. Because of the different results showed by some researchers, further research on this topic is needs to be done. Related to the facts, in this study the use crossword puzzle was implemented combined with the picture as media. Drawing is a tool in learning activities that provide a visual experience toward students in order to encourage the motivation of learning and shifted complex and abstract concepts more simple and easier to understand. The pictures have special benefits in drawing attention for students in learning. This pictorial crossword puzzle is an effective tool for learning and it can be used as an active learning strategy to promote individual and group learning. So that the pictorial crossword puzzle is one of the relaxed and fun mechanisms.

Based on the description above, the study about the influence of pictorial crossword puzzle media toward vocabulary mastery and the initial writing skills of elementary school students is important to do. This media is expected to be suitable to solve the problems that is experienced by students.

## METHODS

This research is experimental research with Quasi-Experimental Design and Nonequivalent Control Group Design with two subject groups are given different treatment for a certain period of time these are experiment and control group. The experimental group is a group of students whose are learned by pictorial crossword puzzle media, and the control group is a group of students whose are learned by conventional learning.

This research was done at SDN Sampangan 01 and SDN Bendan Ngisor, Semarang. The subjects in this study are elementary school students in 1<sup>st</sup> grade, the group of student was used as experimental class is SDN Sampangan 01 students in 1<sup>st</sup> grade with 38

students. While as the control class is SDN Bendan Ngisor students in 1<sup>st</sup> grade with 34 children.

There are several variables in this research, these are independent variable and dependent variable. Independent variable in this research is the use of pictorial crossword puzzle media and dependent variable in this research are vocabulary mastery and initial writing skills.

The analysis techniques was used in this study were: (1) analysis of instrument test validation based on the assessment were provided by the validators toward learning devices, (2) analysis of test result of learning based on analysis of item test of learning result then to measure the validity use product moment formula and the reliability were use cronbach alpha formula, (3) analysis of test result of learning for vocabulary mastery and initial writing skills was use t-test formula.

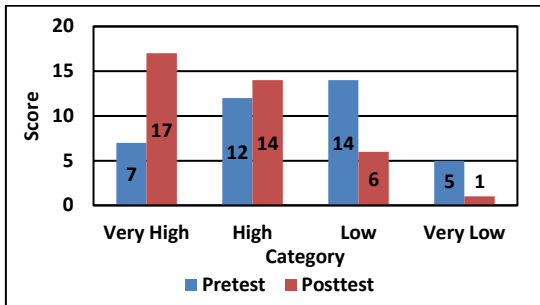
## RESULTS AND DISCUSSION

The research results showed that in the experimental group, students recognize vocabulary mastery of body parts and their functions, and to recognize the living and non-living objects around the environment by using the pictorial crossword puzzle media with pretest mean result of 7.13 and posttest mean results of 8.09. In the control group, pretest mean results of 7.34 and posttest mean result after learning of 7.50.

In the posttest step the experimental group showed an increase in vocabulary mastery. An increase in the score from pretest to posttest is outlined in Figure 1. The results of the t test analysis showed that the pictorial crossword puzzles media had a positive influence on students' vocabulary mastery. The result of t test analysis for the experimental class and control class is set in Table 1.

Testing criteria, if the scores  $t_{\text{value}} > t_{\text{table}}$ , then it means that the pictorial crossword puzzle media affect to increase of vocabulary mastery, and if  $t_{\text{value}} < t_{\text{table}}$ , it means that the pictorial crossword puzzle media does not affect to increase of vocabulary. Based on Table 1, showed

$t_{value}$  of 6,000, and  $t_{table}$  of 2,028. Because  $t_{value} > t_{table}$ , it can be said that the pictorial crossword puzzle media affect to increase of vocabulary mastery with r square scores obtained at 0.50.



**Figure 1.** Learning Outcomes of Vocabulary Mastery

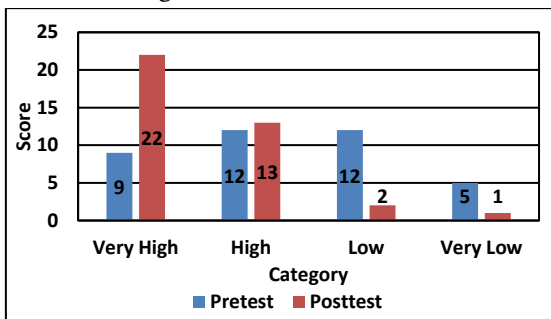
**Table 1.** The Results of The t-Test Analysis

Model	t	Sig
(Constant)	1.224	.229
PCP	6.000	.000

a. Dependent Variable: Vocabulary Mastery

The results of research in the experimental class on the initial writing skills showed that the pretest score mean of 13.66 and the posttest score mean of 15.87, while in the control class got pretest score mean of 14.08 and posttest score mean of 14.85. There are several aspects that are considered in initial writing like completeness of writing, readability of writing, neatness, suitability of form, size of writing. Each aspect earns from 1 to 4 points, so the highest score of all aspects is 20 and the lowest score is 5.

In the posttest step the experimental group showed an increase in initial writing skills. An increase in the score from pretest to posttest is outlined in Figure 2.



**Figure 2.** Learning Outcomes of Initial Writing Skills

The results of t-test analysis showed that the pictorial crossword puzzles media also affect

to initial writing skills. For more details can be seen in the Table 2.

**Table 2.** The results of the t-test analysis

Model	t	Sig
(Constant)	-.584	.563
PCP Media	7.101	.000

a. Dependent Variable: Initial Writing Skills

The testing criteria are if the  $t_{value} > t_{table}$ , then it means that the pictorial crossword puzzle media affect to increase of initial writing skills, and if the  $t_{value} < t_{table}$ , it means that the pictorial crossword puzzle media does not affect to increase of initial writing skills. Based on Table 2. showed  $t_{value}$  of 7,101, and  $t_{table}$  of 2,028. Because  $t_{value} > t_{table}$ , it can be said that the pictorial crossword puzzle media affect to increase of initial writing skills with r square scores obtained at 0.58.

Based on the data of t-test results in Table 1 and Table 2, there is the affect of crossword puzzle media on vocabulary mastery and initial writing skills of the student. Similar research is also conducted by Wijastuti (2013) to determine whether there are differences in learning outcomes of fourth-grade students in IPS subjects between those who apply crossword puzzle strategies and those using conventional learning. The results of this study have significant differences in social studies learning outcomes between students who use crossword puzzle strategies and those who use conventional learning. Annisa, et al. (2014), the main benefit of using crossword puzzles were enrich the vocabulary and increase the student interest.

The use of crossword puzzle as a learning media in improving learning outcomes of 5<sup>th</sup> grade elementary school students in social lessons also been proven by Mustofa, et al. (2017). Has also Elviza (2013) in her research found that there is improving vocabulary through game technique of crossword puzzles in 1<sup>st</sup> grade junior high school students. Laksmi, et al. (2014) in her research shows that there are differences in learning achievement between students who learned social science through brain-based learning asissted by crossword puzzle media and

the students who learned conventional learning at the fifth grade elementary school.

The use of media in the learning process is very important to convey messages to learners and of course so that learning becomes more enjoyable. One alternative that can be used to train mastery and initial writing skills is a pictorial crossword puzzle media. According to Raines (2007) crossword puzzles are an educational strategy that can be used by students and are a fun way to keep the mind sharp. They're a relaxed and fun mechanism for either individual or group learning.

## CONCLUSION

There is a positive influence by using the pictorial crossword puzzles media toward vocabulary mastery. It can be seen in the increase of learning result score before and after learning with using pictorial crossword puzzle that it was gotten increasing of the score mean of 0.54 in moderate category, while in the control group using conventional learning was gotten an increase of score mean of 0.03 in low category.

There is a positive influence by using pictorial crossword puzzles media toward initial writing skills. It is seen in the increase of learning result score before and after learning with using pictorial crossword puzzle that was gotten increase of 0.35 in moderate category, while in the control group using conventional learning that was gotten an increase of 0.11 in low category.

Based on the results of this research, pictorial crossword puzzle media can be used as an alternative for use in the learning process especially in developing the language of children, because the main benefits of this pictorial crossword puzzle is to train vocabulary mastery, and are a fun way to keep the mind sharp.

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