

The Effectiveness of Beginning Reading and Writing Skills Learning with PWIM and CIRC at The First Grade Students

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Abstract

Learning in reading and writing is given in elementary school for the first grade Students known as Beginning Reading and Writing (MMP) is a habit for the first grade students to recognize basic literacy. Beginning reading and writing learning are carried out with innovative models that need to be measured for effectiveness. The aims of this study is to analyze the effectiveness of the initial reading writing skills learning with the picture word inductive models and cooperative integrated reading and composition models at the first students of SD Unggulan Terpadu Bumi Kartini Jepara. This research was conducted with a randomized pre-test - post-test comparison group design. The test and nontest method collect data. The results showed that the use of inductive picture-word models was more effective than using cooperative integrated reading and composition models. This result is based on the results of the t-test, which shows that the average post-test score of the beginning reading and writing skills with the picture word inductive model is higher than using the cooperative integrated reading and composition model ($89.4 > 88$) with a significance level < 0.05 . The conclusion of the research shows that the picture word inductive model is effective in improving beginning reading and writing skills. The inductive word picture model can help students who have difficulty in initial reading and writing.

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INTRODUCTION

Language learning plays an important role and has a large role for the Students ability in communicate. The aim of Indonesian language learning is to improve the Students ability in Indonesian communication, both verbally as well as in writing and to give rise to the creations appreciation of Indonesian people (Zulaeha, 2013). Indonesian language learning includes four aspects of language namely listening, speaking, reading, and writing. All that aspects must be developed for the students since in the first grade (Kusminah, 2012).

Learning to read and write for the first grade students is given simply. Students learn it gradually. Recognition starts from a letter by letter, which is then strung together into words. This teaching is known as Beginning Reading and Writing (MMP) to introduce how to read and write with specific techniques until students can express ideas in written form; in other words, simple sentences. Learning to read and write in the beginning is very important to be taught in the first grade because it is the basis for mastering various fields of study and to support the implementation of the learning process.

In SD Unggulan Terpadu Bumi Kartini Jepara, learning to read and write is not optimal yet. Based on the result of interviews and observations, some problems has been found in initial reading and writing learning. The types of difficulties that has been found in initial reading includes unknowing the double consonants / double vowels, guessing words, it is difficult to distinguish the same letters.. Some types of difficulties that has been found in initial writing are too slow in writing, a wrong direction in writing letters and numbers, letters or numbers are not legible, two lines are also attached to the word E so as C. Other factors that influence the ability to read and write skills, in the initial, include the teacher not using the learning model so that the students motivation to participate in learning is reduced.

Teachers must have knowledge and skills in how to plan and manage a learning process well. The use of appropriate learning models can

foster a sense of pleasure towards the lesson and increase motivation in doing assignments, make it easy for students to understand the lesson so that it allows students to achieve good learning outcomes. According to Trianto (2007) that in teaching a particular subject matter (material) must be chosen teaching model that is most appropriate to the objectives to be achieved.

The use of various media, and learning modls will make students keep motivated in learning without any pressure, enjoyable also the content of beginning reading and writing learning can be understood easily (Prahesti, Utsman, & Mardikantoro, 2016).

The picture word inductive model or Picture Word Inductive Model (PWIM) is one of the models that can be used to improve the initial reading and writing skills. The Word Inductive Model is designed to be a significant component of the language arts curriculum, especially for novice readers at the elementary level, and at a higher level (Joyce, Well, Calhoun, 2011). Picture word inductive model work to introduce an early literacy activity to students (Bali, Fakhruddin, & Rifa'I, 2016).

In addition to the inductive model picture word model, other learning models can be used for reading and writing, namely the Cooperative Integrated Reading and Composition model (CIRC). Cooperative integrated reading and composition learning model is one of the comprehensive cooperative models for teaching-learning to read, write, and speak the language (Suprijono, 2012).

The application of the picture word inductive model and the cooperative integrated reading and composition model to improve the initial reading and writing skills is supported by the results of a previous study conducted by Septiani (2013). The results showed that the picture word inductive model, and the cooperative integrated reading and composition model are learning models for reading and writing across the curriculum. Cross-curriculum learning is the teaching of reading and writing in a variety of texts (such as Language, Science, Social, and Mathematics).

The inductive model word picture and the cooperative model of integrated reading and composition are thought to be effective in improving reading and writing skills for the first grade students of SD Unggulan Terpadu Bumi Kartini Jepara.

METHODS

This study aims to analyze the effect of using inductive picture word models and cooperative integrated reading and composition model for the initial reading and writing skills. The research design used in this study was experimental. The type of experimental research that will be used is a randomized pre-test - post-test comparison group design. In this research design there are two classes, namely experimental class I and experimental class II (Sukmadinata, 2010). The two groups were given a preliminary test. The experimental class I was given treatment (X1) by applying the picture word inductive model during learning and for the experimental class II being treated (X2) by applying the cooperative integrated reading and composition model. At the end of learning, both classes given a final test to determine the effect of the treatment that has been given. The results of the initial and the final tests of each group were compared.

The population of this study is the thematic learning of reading and writing skills for the beginning at the first-grade students of SD Unggulan Terpadu Bumi Kartini Jepara in the academic year of 2015/2016 that is consisting of 4 classes namely first grade "Demak", first grade "Kudus", first grade "Pati", and first grade "Jepara", each class totaling 25 students. The reason for choosing the first grade of SD Unggulan Terpadu Bumi Kartini Jepara for this study was because the first grade had equivalent reading and writing skills.

Data collection techniques used in this study were formative tests in oral, a written form which was assessed by the initial reading and writing rubric.

RESULTS AND DISCUSSION

Data from this study were obtained from the pre-test and post-test results as well as the results of the post-test of each group being compared. This data is processed based on research hypotheses using the Statistical Product and Service Solution (SPSS) version 23 software program with the relevant test analysis prerequisite techniques namely data normality test and data homogeneity test. The normality test was carried out with Kolmogorov-Smirnov. The pre-test data obtained in the sig column for the class before using the picture word inductive model with 0.158 significance level, whereas in the cooperative integrated reading and composition model the significance level is 0.086. It means that the significance level in both classes > 0.05 shows the data are normally distributed. So it can be concluded the pre-test data in the class before using the picture word inductive model and the cooperative integrated reading and composition model normally distributed.

The homogeneity test of pre-test data uses Levene's test through the SPSS program. Testing with Based on Mean obtained sig. 0.681 > 0.05 means that the data come from homogeneous sample groups. The average similarity test is carried out by comparing the initial value (pre-test) conducted in the two classes. If the average value of the classes in the two experimental classes is relatively the same and not far adrift, then it can be said that the initial abilities of the two classes are the same. After carrying out the initial tests in both classes, the average value obtained in the experimental class I before using the picture word inductive model was 69.8, and the experimental class II before using the cooperative integrated reading and composition model was 68.6. The two average results are then compared through statistical calculations using the SPSS program version 23 with one-sample t-test. Criteria for decision making on average similarity test, that is, if $t_{\text{value}} \leq t_{\text{table}}$ and significance > 0.05 , then there is no difference significantly in initial ability between

the experimental and control classes (Sugiyono, 2013).

Pre-test data from the homogeneity test results in the Levene Statistics column showed 0.681 significance value. With > 0.05 significance value, it can be concluded that the pre-test values of the two classes are homogeneous, so that the t-test uses the Equal variances assumed output. In the Equal variances assumed output line, it is known that the significance value of $t_{\text{value}} = 0.477$, it means $0.477 > 0.05$. Referring to the provisions decision making of the hypothesis test, then H_0 is accepted, and H_1 is rejected, it means that there is no difference in the average pre-test value in the class using the picture word inductive model, and the class using the cooperative integrated reading and composition model.

The post-test results are the results of initial reading and writing skills, after carrying out learning by using the picture word inductive model, and the cooperative integrated reading and composition model. The results of reading and writing skills for students after carrying out thematic learning with inductive picture word models in the first grade "Demak" highest score = 100, lowest score = 65, average = 89.4, median = 90, mode 90, and deviation standard = 9.43. While on the results of reading and writing skills of students, after carrying out learning with the cooperative integrated reading and composition model in the first grade "Jepara" the highest score = 100, the lowest score = 70, average = 88, median = 90, mode = 90, and standard deviation = 9.789. A normality test is performed using the SPSS software program version 23. Post-test data normality test results for classes using picture word inductive models with the Kolmogorov-Smirnov test precisely in the sig column are $0.07 > 0.05$, whereas in classes that use cooperative integrated reading and composition models, $0.034 > 0.05$ means that both classes have distributed data normally. Then it can be concluded the post-test data in the class after using the picture word inductive model, and the

cooperative integrated reading and composition model are normally distributed.

The homogeneity test of post-test data is using Levene's test through SPSS 23 program. The significance of the Levene Statistics column shows 0.451 significance value. With a significance value > 0.05 , it can be concluded that the results of the post-test of the two classes are homogeneous.

This hypothesis test used a two-sample t-test (Independent Samples t-test) and paired sample t-test. Hypothesis testing is assisted with SPSS 23 software. To find out whether H_1 or H_0 is accepted or rejected is to look at the t value in the t-test for Equality of Means column. Decision making is seen from the significance value. If the significance value is more than 0.05 then H_0 is accepted, while if the significance value is less than 0.05 then H_0 is rejected. Homogeneity test results in the Levene Statistics column shows $0.451 > 0.05$ significance value so it can be concluded that the reading and writing skills of the two classes are homogeneous so that the t-test uses variances assumed. On the equal variances output line, it is known that the significance value of $t_{\text{value}} = 0.600$, it means $0.600 > 0.05$. Referring to the provisions hypothesis test decision making, then H_0 is accepted, and H_1 is rejected, it means there is no difference in the average value of the class using the picture word inductive model, and the class using the cooperative integrated reading and composition model. There is no significant difference due to the models, and classes that use the cooperative integrated reading and composition model have a slight or only slight variation.

The average value of the class using the inductive model word picture is 89.40, while the average value of the class using the cooperative integrated reading and composition model is 88.00. So it can be concluded that the average value of the class using the picture word learning model inductive model is higher than the average value of the class using the cooperative integrated reading and composition model that is $89.40 > 88.00$.

The paired sample t-test shows the level of significance in the class that uses the picture word inductive model is 0.000, and the average difference is -19.600. Whereas in the class that uses the cooperative integrated reading and composition model, the significance level is 0.000, and the average difference is -19.400. From these data it can be concluded that in the two classes have 0.000 significance level then < 0.05 means that there are differences in the value of reading and writing skills before and after learning in classes using picture word inductive models, and classes using cooperative integrated reading and composition model.

Based on the results of the study obtained data that inductive picture word models can improve the initial reading and writing skills in thematic learning. This can be seen from the average results of the initial reading and writing skills with the picture word inductive model higher than the cooperative integrated reading and composition model. The inductive word picture model is a learning model where students are asked to explore an image to recognize words by utilizing the natural abilities of students in the field of reading and writing to think inductively (Joyce, Weil, Calhoun, 2011). The use of the inductive picture word model emphasizes reading and writing skills, while the cooperative integrated reading, and composition model emphasizes more on the reading field.

Also, the results of Apriliana's study (2013) which stated that the inductive picture word model influences the initial reading and writing skills. So that the use of the inductive picture word model makes it easier for teachers to teach the initial reading and writing skills, and the learning of reading and writing skills becomes effective.

CONCLUSION

Learning with the picture word inductive model is more effective in improving initial reading and writing skills than the cooperative integrated reading and composition model. It can be seen from the results of the students' initial reading and writing skills who received

the inductive model word picture treatment higher than students who received the cooperative integrated reading and composition model.

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