

The effectiveness of using Picture Word Inductive Model (PWIM) to improve students' vocabulary knowledge at the eighth grade of SMP Negeri 1 Bandar Sribhawono in the academic year 2022/2023

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ABSTRACT

The research aimed to find out whether there was a significant difference in students' vocabulary knowledge after the implementation of Picture Word Inductive Model in the teaching-learning process and the students' perception towards the use of Picture Word Inductive Model as the learning strategy. This research was conducted at the eight-grade students of SMP N 1 Bandar Sribhawono in the academic year 2022/2023 in the first semester. Class VIII.1 consisting of 33 students was chosen as the sample of this research. This research was quantitative. The design used was one group pretest and posttest. The instruments were multiple choice tests and questionnaire. The data of vocabulary tests were in the form of scores of multiple-choice test taken from pretest and posttest which had been calculated. The results showed that the students' mean score of the pretest was 59.57 and the mean score of the posttest was 74.21. The improvement of students' mean scores from pretest to posttest was 16.63 and the hypothesis testing for p-value of a significant level was 0.00 which was lower than 0.05, so H1 is accepted. There is a significant difference in students' vocabulary knowledge after the implementation of Picture Word Inductive Model. Moreover, the questionnaire was in the form of scores and analyzed by using a frequency distribution table. The results showed that out of 33 students, 29 of them had positive perception toward the implementation of Picture Word Inductive Model with a percentage of 87.87%. Thus, it can be concluded that the students' perception of Picture Word Inductive Model in learning vocabulary is positive. Based on the results, it can be concluded that the use of Picture Word Inductive Model is effective in teaching vocabulary.

Keywords: *Picture Word Inductive Model, teaching vocabulary, perception.*

I. INTRODUCTION

Language plays an important role in human life because language is a means of human communication in everyday life. With language, a person can convey ideas, thoughts, feelings to others, both orally and in writing. Human communication can be through various languages, including English. The existence of vocabulary in English is one of the requirements for mastering English. A person's language skills will be influenced by their ability to master English vocabulary. According to Tarigan (2003), a person's language skills are clearly influenced by the quantity and quality of his vocabulary. Given the rapid advancements in science and technology, the ability to master foreign languages as a means of communication has become a requirement. One of the basic requirements for mastering English is a large vocabulary. It is stated that the English component is divided into three parts: grammar, vocabulary, and pronunciation (Kasihani, 2010). Wilkins, quoted by Thornbury (2002), concludes about the importance of learning vocabulary by saying "Without Grammar very little can be conveyed, without vocabulary nothing can be conveyed." He explained that without (knowing) grammar, we have very little to say. But without (knowing) vocabulary, there is nothing we can express. It is true that even though we have good grammar skills, these abilities will be useless if we don't have enough vocabulary mastery.

Many students currently lack vocabulary mastery, making it difficult for them to comprehend and apply English in educational and communication settings. Based on the results of observations at the Eighth-grade students of SMP Negeri 1 Bandar Sribhawono, students' ability to master English vocabulary is still low. This can be seen from the scores of the eighth-grade students' odd semester assessment results in the first semester of the 2022/2023 school year which are still low as well as oral tests by teachers in the teaching and learning process in the classroom. Of the 33 students, only 8 students or 24.2% scored more than or equal to the KKM, which was 73, the remaining 75.8% had not been completed. The emergence of fear in English lessons, students' passivity is seen during the learning process, difficulties in memorizing vocabulary, so that students' mastery of material cannot be conveyed optimally, as a result, students' vocabulary knowledge scores are low.

Considering the problem, the Picture Word Inductive Model (PWIM) is the most appropriate learning strategy for solving it. It will be an effective and engaging strategy that could be used in any classroom. It seems self-evident that a variety of teaching strategy is required to keep students' attention. Picture Word Inductive Model (PWIM) is a good strategy for teaching English that the researcher is interested in trying because it can be used by teachers to improve their teaching strategy (in teaching English specifically) and can help students improve their vocabulary. Students hear the words correctly pronounce many times, and the picture word chart is an immediate reference as they add these words to their sight vocabulary (Calhoun, 1999). Almost any sound-to-symbol relationship can be emphasized by the teacher (introduced or taken to mastery). Then, many times, students hear and see letters correctly identified and written. Students also hear the words correctly spelled several times and participate in correctly spelling them. Jiang (2014) points that Picture Word Inductive Model (PWIM) is interesting because it allows students to study faster and memorize more easily by connecting pictures and words, emphasizing how to use these words, learning more words, knowing more knowledge, learning happily, making the environment lively, summarizing the words by unit, and deeply memorizing those words.

Based on the background of the above problems, the researcher conducted research on the effectiveness of the Picture Word Inductive Model. Learning with the Picture Word Inductive Model is expected to assist students in mastering English vocabulary, allowing them to achieve good results and making it easier for teachers to provide English material. Furthermore, researcher hope that the Picture Word Inductive Model can be used as a learning s in schools by teachers to help students learn English vocabulary in a more engaging way. Therefore, the researcher conducted a study entitled "The effectiveness of using picture word inductive model to improve the students' vocabulary knowledge at The Eighth Grade of SMP Negeri 1 Bandar Sribhawono in the academic year 2022/2023"

II. METHODS

This research was quantitative study using One Group Pre-test Post-test Design to find out the effect of using Picture Word Inductive Model to improve the students' vocabulary knowledge. The design used one class as the experimental class that received the treatment of using Picture Word Inductive Model. This research was conducted through the procedure of pre-test (T1) that was given before the researcher teaches using Picture Word Inductive Model to measure the students' vocabulary knowledge before they got the treatment. Then, treatment was given four times by using Picture Word Inductive Model to see the significant effect on students' vocabulary knowledge. Hence, post-test (T2) was given after the researcher taught the students by using Picture Word Inductive Model to find out the increasing of students' reading comprehension vocabulary knowledge after they received the treatment. In the last

meeting, the researcher collects supporting data by giving questionnaire for students' responses after the pre-test and post-test.

The population of the research was in SMK Miftahul Huda. The sample was the students who were in the first grade of vocational high school. The researcher took one class which consists of 22 students as the sample of the research. Furthermore, the researcher applied simple random sampling by using a lottery in determining the sample. The data was collected by using a reading test (pre-test and post-test) and a questionnaire. It was collected from oral tests analyzed using the Statistical Package for the Social Sciences (SPSS).

III. RESULTS AND DISCUSSIONS

Result

After giving the treatment and collecting the data the results show on the table below.

Table 1. The Differences between Mean Score of Pre-Test and Post-Test

Pre-test				Post-test			
Interval Score	N	Percentage	Mean	Interval Score	N	Percentage	Mean
86 – 100	2	6,1%	59.57	86 – 100	6	18,2%	74.21
71 – 85	3	9,1%		71 – 85	19	57,6%	
56 – 70	17	51,5%		56 – 70	6	18,2,%	
41 – 55	10	30,3%		41 – 55	2	6,1%	
≤ 40	1	3%		≤ 40	0	0%	

As indicated in table 1 above, the mean score of the pre-test was 59.57, with the greatest score being 83 and the lowest score being 37. It may be argued that the majority of students still received a poor vocabulary knowledge score. Meanwhile, the mean score of the post-test was 74.21, with the highest post-test score being 93 and the lowest score being 47. The fourth interval had the highest frequency range with 19 students, representing 57.6 percent of all students, with a score ranging from 71 to 75. The lowest frequency range was the first interval score, with a total of one students receiving scores ranging from less than 40. It indicates that after being taught by Picture Word Inductive Model, the students' mean pre-test and post-test scores improved from 59.57 to 74.21, with the lowest pre-test score being 37 and the lowest post-test score being 47.

Furthermore, hypothesis testing was utilized by the researcher to determine whether or not the test could be accepted. The researcher then used Paired Sample T-test (SPSS 22.0 for Windows) to assess the hypothesis, with significance indicated by significance ($=0.05$). The formula of criteria of acceptance is as follows:

- a. H_0 is accepted if significance $> \alpha$
- b. H_1 is accepted if significance $< \alpha$

Table 2. The hypothesis of paired samples T-test

		Paired differences							
		Mean	Std Deviation	Std Error Mean	95% Confidence interval of the differences		T	df	Sig. (2- tailed)
Pair 1	N Pre- test N post- test	14.63	-6.06	-1.05	16.78	12.48	13.86	32	.000

Table 2 shows that H1 is accepted while H0 is rejected. Based on this finding, it can be concluded that the treatments administered by the researcher had a positive respond on the students' intention to read. The level of significance indicates that the score was $0.000 < 0.05$. It means there is a significant difference between the students' pre-test and post-test. Then, the T- value score was 12.860 and the t-table score was 2733, indicating that T-value was higher than T- table.

Table 3. The differences between Mean score of each content of vocabulary

No	Types of word	Pre-test	Post-test	gain
1	Noun	61,90%	77,10%	15,20%
2	Verb	57,00%	59,70%	2,70%
3	Preposition	61,70%	75,40%	13,70%
4	Adjective	57,20%	82,70%	25,50%
	Maximum Score	83	93	
	Minimum Score	37	47	
	Mean	59.57	74.21	14.64

As indicated in table 3, there was an improvement in each content of vocabulary after the fourth meetings of being taught using Picture Word Inductive Model as a learning strategy. Based on the data, we can observe the progression of each content of vocabulary; the highest score was in adjective and lowest scores was in verb.

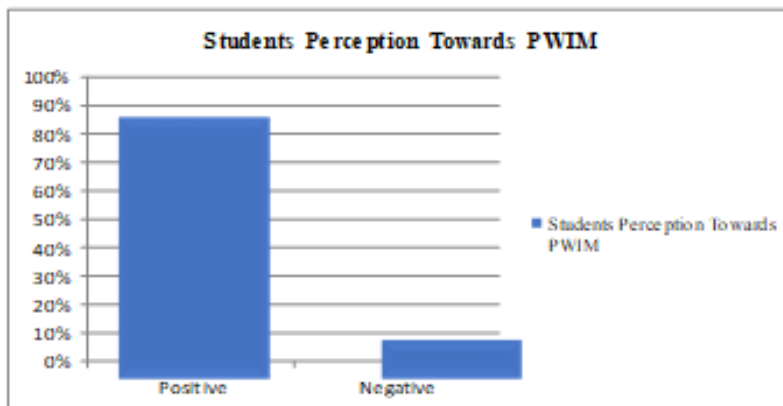


Figure 1. Students' Response towards Picture Word Inductive Model

Figure 1 shows that 4 students (12,13%) of VIII.1 have negative perception and 29 students (87,87%) have positive perception out of 33 students. The number of students who have a positive perception of Picture Word Inductive Model (PWIM) in teaching vocabulary is bigger than those who have a negative perception.

Discussion

Finding 1

The description of the students' vocabulary with the result of data that was explained previously in findings and the description of the students' vocabulary between pre-test and post-test. Students' vocabulary was supported by the mean score of students in post-test higher than the pre-test. Before applying Picture Word Inductive Model (PWIM) as an English teaching strategy, the students could not answer the test vocabulary with false and did not know the meaning of the word. But after applying Picture Word Inductive Model (PWIM) the students could answer the test vocabulary with true and know the meaning of the word as well. The improvement of students' vocabulary could be seen between pre-test and post-test. The students' result was significantly different before and after applied Picture Word Inductive Model (PWIM) in teaching vocabulary material. The students' text in the pre-test content provisions showed that the students were very lacking in vocabulary knowledge. Based on the research that have been conducted, at first meeting students do not know the meaning of the word and it turns out there were still many students did not know the spelling of the word. The students lack in vocabulary and did not care about it. Even though Fries (1982) said learning and remember a set of words is prerequisite in learning a particular language. The essential area of language learning was the lexicon or vocabulary had to be taught absolutely when one learned a language, if not, he did not learn language at all. On the other hand, the students' vocabulary text in post-test was better than pre-test. Students' vocabulary was supported by the mean score of students on post-test in content was 74.21 (Good category). In the treatment for four meetings with the Picture Word Inductive Model (PWIM), it is divided into three steps: pre-test, treatment, and post-test.

In conclusion, the research has been successfully conducted in six different meetings, which consisted of one day of pre-test, four days of treatment, and one day of post-test. The students did well in the test. They also have participated in class actively. After treatment for four meetings with the Picture Word Inductive Model (PWIM) as an English teaching strategy, understanding of students vocabulary has improved and the activity of students in learning and answering vocabulary has increased. Therefore, it

means that the Picture Word Inductive Model in treatment of students“ SMP N 1 Bandar Sribhawono was success to make the students know the meaning the spelling of the word, also that the students more interested in learning process because the students could make their creativities. The students could memorize the words because every word related with some pictures and some object that was repeat several times. As a result, the students enjoy, not feeling bored and more excited in learning process.

Finding 2

Answering the research question number two, the result of students' questionnaire had shown that most of the students had a positive perception toward the implementation of Picture Word Inductive Model in teaching vocabulary knowledge. Most of them chose “strongly agree” and “agree” toward the statements of Picture Word Inductive Model in the questionnaire. In other words, the students perceived that Picture Word Inductive Model help them in learning vocabulary. The finding is in line with Irwanto (2002) who stated that positive perception is the perception that describes all information and responds objects that perceived positively. Meanwhile, negative perception is perception that describes all information negatively or not suitable with the object that perceived. Based on the result of the data analysis of the questionnaire, it was found that out of 33 students, 29 students (87.87%) had positive perception and 4 students (12,13%) had negative perception toward the implementation of Picture Word Inductive Model (PWIM). Thus, the majority of the students (87.87%) asserted that the implementation of Picture Word Inductive Model in teaching vocabulary was very good for them. Based on analysis of every item in questionnaire, in statement 1, as many as 48% or a total of 16 students strongly agree that the Picture Word Inductive Model makes them understand new vocabulary easily. There were only 2 students who answered neutral to this statement. In statement 2, 52% or 17 students strongly agree that the preposition material presented in the Picture Word Inductive Model is in accordance with the learning objectives to be achieved, but there is one student who disagrees with this statement. The highest score is in statement 3, as many as 73% or 24 students strongly agree that the Picture Word Inductive Model can be used for independent study. In statements 4,6 and 9, as many as 61% of students strongly agree that the instructions in the Picture Word Inductive Model make it easy for them to understand teaching materials. The illustrations, pictures and examples in the Picture Word Inductive Model help them to master their new English vocabulary. Then the language used in the Picture Word Inductive Model is well understood.

In statement 5, as many as 55% of students are interested in learning new vocabulary through the Picture Word Inductive Model. Then in statement 7, 64% or 21 students strongly agreed that the Picture Word Inductive Model made it easy for them to understand vocabulary related to the pictures presented. Statements 8 and 12 have the same score, as many as 70% or 23 students stated that they strongly agree that the prepositional material focused on vocabulary knowledge in the Picture Word Inductive Model suits their needs. The clues used in the Picture Word Inductive Model make learning prepositions more interesting.

It is supported by Muliati (2020) who had observed that the majority of her respondents have positive perception toward picture media in learning vocabulary. The ten questionnaires showed that picture media was the good and enough good result dominantly toward students to encourage their comprehension of vocabulary. By using picture media, it can ease students to understand the meaning of word and enrich knowledge to the students. It also makes students more focusing and interesting to participate the process of learning vocabulary and it also helps students to strengthen memory in remembering words.

IV. CONCLUSIONS AND SUGGESTIONS

The use of Picture Word Inductive Model as a learning strategy for vocabulary can improve students' vocabulary knowledge. In some contents of vocabulary, it was shown the improvement increased significantly in adjective. With this mind, Picture Word Inductive Model facilitates students to learn in attractive way. Therefore, teachers may adopt Picture Word Inductive Model in order as an alternative learning strategy for boosting their new vocabulary especially in describing something. Furthermore, the majority of students had positive responses after using Picture Word Inductive Model. The average of students agreed that learning vocabulary towards Picture Inductive Model increase their vocabulary knowledge. As a result, it leads them to master several kinds of vocabulary.

improving the system and facilities for a better condition in teaching and learning process is necessary. Furthermore, the English teacher should be creative to choose the best strategy to apply in learning process in order to make the class alive; the teacher should present the language in an enjoyable, relaxed and understandable; the teacher is not only as an information giver but also as facilitator; the teacher should teach using appropriate strategy to teach the students and make variation of strategy in every meeting. The students are hoped to be active in learning process; the students should know that improving vocabulary is not always difficult because improving vocabulary can be enjoyable and easy. Fourth is for the other researcher; This research was conducted in junior high school in Bandar Sribhawono. Therefore, further researchers can try to find out the use of Picture Word Inductive Model (PWIM) at different levels of school or different settings.

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