

## THE EFFECT OF USING “PICTURE WORD INDUCTIVE MODEL (PWIM)” ON STUDENTS’ VOCABULARY MASTERY

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### *Abstract*

*The purpose of this research is to know the effect of using the “Picture Word Inductive Model (PWIM)” on students’ vocabulary mastery. The method used in this research is pre-experiment with one group pretest-posttest. The population in this study were students of class VIII at SMP Negeri 28 Makassar for the 2022/2023 academic year. This research used a cluster random sampling technique. The sample of this research was class VIII A, which consisted of 20 students. The instrument used in this research was a vocabulary test. The results of this study, the mean score of students' pretest and posttest was increased (64.80 to 86.05). The standard deviation score for the pretest (17.59) and posttest (9.53), showed that the standard deviation of the posttest was smaller than the standard deviation of the pretest. The result of statistical hypothesis testing by using sample t-test found that ( $Sig < \alpha$  (0.05)), Therefore,  $H_0$  was rejected and  $H_1$  was accepted, which means that the use of the Picture Word Inductive Model (PWIM) can improve students' vocabulary mastery.*

**Keywords** — *Effect, picture word inductive model, vocabulary mastery.*

### INTRODUCTION

Language is an important component of communication. One must also be able to communicate with people of various nationalities. They must be fluent in at least two languages, preferably English, a world language. People must possess a set of English words, or vocab, to hold a conversation. Huyenand Nga (2003) argues that one of the four language learning competencies is the use of vocabulary. As explained by Cameron (2007), vocabulary is the basic learning of the language at an introductory level. As a foundational skill for learning the four skills of English, vocabulary is crucial for students to master.

According to the researcher's experience teaching English at SMPN 28 Makassar, students usually struggle to translate sentences because they lack vocabulary. Some claimed it was

challenging to remember new words they had learned because they rarely practice new vocabulary. Besides that, they did not know the part of the vocabulary. It is difficult for them to provide accurate answers to the test questions.

To solve the problems, the researcher employed the PWIM Method, which was according to the earlier description. It is a practical and interactive method that can be used in any classroom. To keep students interested, it should go without saying that different teaching methods must be used. The PWIM method is an incredibly interesting method for teaching English, and the researcher is interested in trying one that teachers can use to improve their learning style (in teaching English specifically) and assist learners to enhance their vocabulary.

Several researchers have conducted research related to PWIM. The vocabulary cards used in Safirah's (2016) study were used to improve students' vocabulary mastery. This research revealed that the students' vocabulary had improved. Students gained confidence in speaking up and found it easier to memorize new words. It also increased student participation in learning activities and provided more opportunities for communication.

Susanna (2017) discovered in her study that the goal of the study is to discover the effect of PWIM on the vocabulary learning achievement of the school where she did the research. This method has a substantial impact on both students' vocabulary achievement and motivation in the teaching and learning process.

Based on the description above, the researcher was encouraged to conduct research titled "The Effect of Using "Picture Word Inductive Model (PWIM) on Students' Vocabulary Mastery."

## LITERATURE REVIEW

### 1. Teaching Vocabulary

Teaching is an important part of the educational process. Many factors must be considered when teaching. It should include all components of education, including teachers, students, and subjects. Education is complex, so people define it from different perspectives. Education is the process of leading and enhancing students, allowing students to study, and creating learning environments. This assertion implies that education is about engaging learners and directly imparting knowledge to students.

A word or vocabulary is the fundamental unit of language learning. Knowing vocabulary is critical when learning English. Some terms are defined below. "Vocabulary can be loosely defined as the words we teach in a foreign language," writes Penny (1996). On the other hand,

some parts of the vocabulary consist of two or three words, such as police station or father-in-law, but may consist of multiple words that convey one thought. In all these cases, a useful rule is to discuss lexical items rather than words.

There are several kinds of vocabulary

a. Nouns

Noun belongs to the most essential components of a sentence. Its combination with verbs either aids in sentence formation is either required for each full sentence.

b. Pronouns

"Nouns" is correct for some types of pronouns, but not for others. The true alternative pronoun can refer not only to the noun (predecessor) that precedes it but also to the larger part of speech that precedes it.

c. Verbs

Verbs are the hardest part of speech to understand. Different combinations with nouns describe different types of sentences: sentences, questions, commands, exclamations, etc.

d. Adjectives

Adjectives are grammatical modifiers that have the property of being comparative.

e. Adverbs

Definitions of adverbs range from words with strong lexical content (explaining the verb's action or suggesting such meaning in time and space) to words that can only be used for emphasis.

f. Prepositions

In traditional grammar, prepositions are classified as parts of speech.

To master the vocabulary items, you must master the following items:

a. Frequency

For many years, the frequency was very important in teaching English because of the use of repetition counting words as a means of developing curriculum and materials.

b. Pronunciation

Teachers often require considerable practice with new words in the early stages of language learning to help students learn the correct syllable stress patterns.

c. Contextualized

Texts, on the other hand, represent lingual and mental realities, and displaying phrases in their proper perspective provides services while reducing intervention.

d. Processing depth

There is not enough research on language learning to support this, but it is certainly consistent with teachers' understandings and students' self-assessments.

e. Building word network

A common question for teachers is whether students should be easily motivated in a non-specific way to actively build new associations of words, thereby expanding their mental vocabulary network, or whether vocabulary learning should be an activity that requires direct instruction to form the associations that students made.

Hiebert and Kamil (2005), explained that there were at least two forms of linguistic knowledge. They were:

a. Productive vocabulary

A productive vocabulary is a collection of phrases that can be employed either orally or in writing. These are commonly known and frequently utilized words.

b. Receptive vocabulary

Receptive vocabulary means phrases that students recognize and understand while those appear through context but are unable to reproduce correctly.

2. Picture Word Inductive Model

Calhoun (1999) created a Picture word induction model (PWIM) that generates words from a child's listening and speaking vocabulary by using images of familiar objects, actions, and scenes. Phonetic structures accompany these words as they expand their reading and writing vocabulary.

PWIM has some features that are used to guide learners to "look up words, add words to their literacy vocabulary, and attempt to discover phonetic and structural principles, including the use of analysis and observation in literacy research." Building a visual vocabulary, learning to analyze the structure of phrases and words, and composing paragraphs and sentences all inspire and educate readers to think about the inductive approach and make generalizations about their understanding of grammar and structure. It's a useful technique. This strategy also

aims to help students develop concepts, paragraphs, sentences, and lexical structures in general content topics like math, reading, science, and sociology (Xua and Jiang, 2014).

Here are some steps to teach vocabulary using PWIM:

- a. Define a picture.
- b. Students should be asked to name what they see in the image. (Label and pronounce the image's identified parts.)
- c. Read the picture word table aloud and review it.
- d. Have students read the words (using line graphs if needed) and Sort the words into different categories. Determine common concepts to emphasize throughout the class (consonantal onset, rhyming words, etc.).
- e. Check image vocabulary (say, write, repeat).
- f. Add words to the picture word diagram and word bank as needed.
- g. Assist students to come up with a name for the picture-word chart. Students must think about the information on the chart and what they would like to be said about that as well.
- h. Give learners an assignment to write a sentence, based on the vocabulary found.
- i. Go over the sentences and words once more.

Based on Calhoun (1999), several advantages include in PWIM, they are:

- a. Numerous times, the proper pronunciation of words is heard by students. Also, when adding words, you can directly refer to the image's word table. Almost all sound-symbol relationships are emphasized (introduced rather than learned) by the teacher.
- b. Students get to listen to and see correctly identified letters written numerous times.
- c. Students repeat listening to correctly spelled words and participate in their correct spelling.
- d. When writing sentences, the teacher employs basic English (converting students' sentences as necessary), proper punctuation, and mechanical design (e.g., commas and capital letters).

## METHODS

This research used a quantitative research method with pre-experimental. The research design in this study is a one-group pretest-posttest. So, in this study, only one class is used which acted as an experimental class that was given a pre-test and then given treatment and

after being given treatment, the researcher gave a post-test. The researcher uses this method to measure the effect of an action or treatment on the variables. The design one-group pre-test and post-test can be described as:

X1                      T                      X2

Where:

X1: Pretest

T: Treatment

X2: Posttest

(Gay, 2006)

The cluster random sampling technique was applied. This study included eighth-grade students from SMP Negeri 28 Makassar for the academic year 2022/2023. The sample consists of 20 students from class VIII A. A pre-test and post-test vocabulary test was employed as the research instrument in this study. The researcher displayed a picture on the blackboard and instructed the students to identify the vocabulary that contain in the picture. The type of test used in the pretest is the same as the posttest. In this study, researchers employed SPSS to analyze quantitative data. find the frequency and percentage, mean scores, standard deviation, and significant differences between pretest and posttest scores.

## RESULTS

### 1. The Frequency and Percentage of Students

Table 1. Pre-test and Post-test Scores

No.	Class	Range	Pre-test		Post-test	
			F	P	F	P
1	Very good	93-100	0	0%	6	30%
2	Good	84-92	3	15%	5	25%
3	Enough	75-83	3	15%	7	35%
4	Not enough	< 75	14	70%	2	10%
Total			20	100%	20	100%

Table 1 showed that before being given treatment, in the pretest, there is no student scored "very good", 3 (15%) students scored "good", 3 (15%) students scored "enough" and 14 (70%) students get a "not enough" score. Whereas when treatment is complete, in the posttest, there were 6 (30%) students who scored "very good". 5 (25%) students scored "good", 7 (35%)

students scored "enough", and 2 (10%) students scored "not enough". This showed that student achievement increases after being taught with the use of PWIM.

2. The score of mean and standard deviation of the pretest and posttest

Table 2. Mean score and standard deviation

Test	Mean Score	Standard Deviation
Pre-test	64,80	17. 597
Post-test	86,05	9. 539

Table 2, showed that the pretest means 64, 80 while the posttest means 86, 05, the standard deviation for the pretest was 17, 597 and for the posttest was 9. 539. From these results, it can be seen that the standard deviation of the student's posttest is smaller than the standard deviation of the student's pretest

3. Hypothesis Testing

a. As mentioned in the previous chapter, in the hypothesis, there are two possible outcomes that the study predicts, they are:

- 1) The first result is  $H_0$  (Null Hypothesis), where the use of PWIM is not able to improve students' vocabulary mastery.
- 2) The second is  $H_1$  (Alternative Hypothesis), where the use of PWIM can improve students' vocabulary mastery.

b. The criterion for testing the hypothesis is:

- 1) if Sig(2-tailed) or the significance level is lower than the alpha level ( $\text{Sig} < \alpha$  (0.05)), it can be indicated that the score of the use of PWIM on students' vocabulary mastery between the pretest and posttest differ significantly and increase.
- 2) if Sig(2-tailed) or the significance level is higher than the alpha level ( $\text{Sig} < \alpha$  (0.05)), it can be indicated that the score of the use of PWIM on students' vocabulary mastery between the pretest and posttest did not differ significantly and did not increase.

4. The Significant Differences Between the Pretest and Posttest Score

Table 3. Significant Differences

Test	Significant Value	Significant Level
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Pre-test- post-test	.000	0.05
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Based on the criterion for testing the hypothesis, it can be seen in the results of this research that the mean is statistically significant at the level of Sig = .000 is smaller than the alpha or  $\alpha$  level (0.05). So, H1 (Alternative Hypothesis) is accepted, meaning that the use of PWIM can improve students' vocabulary mastery, and H0 (Null Hypothesis) is rejected because H0 means that the use of PWIM is not able to improve students' vocabulary mastery.

## DISCUSSIONS

This section interprets research findings concerning the effect of PWIM on students' vocabulary mastery. This study included seven meetings, including a pretest, treatment, and post-test. The treatment provided by the researcher is in the form of several pictures printed by the researcher. The study's findings were obtained using quantitative methods and SPSS. The researcher discovered that using the PWIM can help students enhance their vocabulary mastery. This finding is supported by Safirah (2016), who used cards to help students improve their vocabulary mastery. The research revealed that the students' vocabulary had improved. Students gained confidence in speaking up and found it easier to memorize new words. It also increased student participation in learning activities and provided more opportunities for communication.

Based on the findings developed by students' vocabulary mastery in the previous section, students scored higher after the treatment than before the treatment. The vocabulary test was done twice as a pretest and posttest as stated in the data collection. The pretest is applied before the treatment to determine the students' vocabulary. After treatment, posttests were administered to assess students' performance in learning English, particularly vocabulary acquisition using PWIM.

Before using the PWIM in the teaching of vocabulary, the researcher discovered that vocabulary mastery of students was still low. The outcome of the pretest demonstrated this. The vocabulary of students was limited. The technique or method used by the teacher in teaching was one of the factors, although it was monotonous. As a result, the students became bored with the classroom learning process.

The researcher concluded that the students' ability had improved after five meetings of treatment. It was demonstrated by the post-test results. The vocabulary mastery of students



improved after using PWIM to teach vocabulary. Making it easier for students to remember and memorize vocabulary, as well as making students participate in the teaching process more. Learners loved the teaching process like identifying the vocabulary in the picture, discovering new words from pictures, and correctly pronouncing the vocabulary.

Using the PWIM contributed to and benefited the learning process of students. This technique assists learners in improving their vocabulary mastery learning. The technique also allows students to add and get new words by identifying words in the picture. Giving students chances to figure out words from images.

This technique motivated students in vocabulary mastery to develop their imagination, observation, thoughts, and ideas by the material and situation. It allowed students to learn while also playing, as they observed the situations that existed and felt challenged to identify the vocabulary contained in the picture. In the classroom, students are more active and might study without getting bored or drowsy.

PWIM helped students improve their vocabulary mastery. Students were capable of remembering and memorizing more vocabulary, and they were more engaged in the learning process. Students enjoyed activities like identifying vocabulary in pictures, discovering new words from pictures, and learning vocabulary pronunciation.

## CONCLUSIONS

The results prove that the use of PWIM can improve vocabulary mastery of students in class VIII A students of SMP Negeri 28 Makassar. Picture Word Inductive Model (PWIM) can attract students' attention in learning because it is very interesting, which can make it easier to understand. It can be seen from the data which shows that the post-test average value after being given treatment is 86,05, which is higher than the pre-test average value before being given treatment which is 64,80. Data analysis also shows that  $\text{Sig}(2\text{-tailed}) < \alpha$  or  $.000 < 0.05$ . So, the null hypothesis ( $H_0$ ) is rejected, and the alternative hypothesis ( $H_a$ ) is accepted. It can be concluded that the use of PWIM can improve students' vocabulary mastery was proven.

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