

IMPLEMENTED PWIM IN DEVELOPING STUDENTS' COMMUNICATIVE COMPETENCE OF SMK ISLAM WIJAYA KUSUMA JAKARTA

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ABSTRACT

The research aimed at determining the significant effect of implemented Picture Word Inductive Model (PWIM) in developing students' communicative competence in SMK Islam Wijaya Kusuma Jakarta. The students' communicative competence was measured quantitatively by conducting the experiment method. There were 47 of the eleventh-grade students as samples chosen randomly by using purposive sampling technique. The data were performed by using the test instrument with two groups on post-test design; one group became the experiment class and the other group became the control class. The questionnaire was assigned to students at the end of the lesson. The post-poster cycle assessment was given as a basis of measurement in analyzing students' communicative competence. The data were analyzed by using t-test two tailed formula to find out the significant difference of each class of the sample (simple effect). Findings have shown that there is a significant effect of using PWIM to students' communicative competence which is reflected from the enhancement of students' comprehension toward the pronunciation, fluency, grammar, vocabulary as well as the increase of their motivation and creativity experiencing the learning process more communicatively.

Keywords: picture word inductive model, communicative competence, English learning process

INTRODUCTION

People are surrounded by visual information in the world because whether it is at home or in public places, information in the form of words and pictures permeates people's lives. However, the connection of words and pictures is very suitable for learning a language, especially for learning a foreign language. Pictures meet with a wide range of use not only in acquiring vocabulary, but also in attaining many other aspects of foreign language teaching.

Wood and Tinajero (2002) claimed that pictures can be used as stimuli to promote students' knowledge that is important in their learning process to be successful in all subject areas. They consider the Picture Word Inductive Model (PWIM) as a tool that has more than one advantage. PWIM can be used to teach English, and also can be applied to teach other subjects based on English learning for their better understanding, specifically in learning speaking for developing students' communication skill. To be more specific, beside lessons, pictures are in the main focus. They might be used as; (1) a stimulus for writing and discussion, (2) an illustration of something being read or talked about, (3) a background to a topic and so on. Pictures are also

suitable for any group of learners independently on age or level, and can be used in lots of various ways in the teaching and learning process.

As one of valuable aids in teaching foreign language, pictures have a significant role for teachers in gathering students' attention, particularly in teaching speaking skill. Students' speaking performance really depends on how teachers deliver the lesson. Teachers should provide the teaching materials that are suitable to the students' needs. Moreover, teachers should also apply the most appropriate methods and techniques in the teaching-learning process. In other words, it is necessary for the teachers to equip themselves with a good preparation as a well-prepared teacher may be able to help students develop their knowledge and skill in a higher learning achievement.

Teaching speaking for Vocational High School students will need special attention as they are prepared to get involved with such work environment by time they graduate from the school. They should have a good communicative competence as their basis in handling such scopes of work they face, mainly in using English as the medium of communication. As far as communicative competence is concerned, unfortunately, there are still many

students encountering difficulties to use English in real life communication. These difficulties may be caused by some factors, which are; (1) lack of knowledge on vocabulary, (2) lack of knowledge on basic grammar, (3) lack of motivation to read various text materials, and (4) lack of confidence to get involved in real-life communication. Moreover, some students are still incapable of pronouncing words, making a good statement or expressing statements. They use monotonous strategy to speak as teachers taught them. Furthermore, they still have lack of speaking materials which actually have to be provided by themselves or by the teachers.

In the academic language teaching, it is a must for teachers to foster students' literacy in a broader sense of discourse competence for which having the ability to interpret and to evaluate both written and spoken texts (Kern, 2000). Preparing students to communicate in such contextualized discourse, means that teachers performing them have to be able to socialize with the larger community. In the learning process, students must considerably be put into the communication affair of various types of the situation of talk, both in formal situation or in informal situation. Without having good literacy, then students may find difficulties to interact directly dealing with their social contexts of use of spoken interactions. The students' competence in literacy plays an essential role in defining the ability in communicating the meaning of the talk. To this extent, students are able to create access to the evolving language of language work and also to design their social futures. It is the reason why literacy is needed by all of students to fulfill the employment.

Since Vocational High School students put their focus of learning language mostly on handling matters in such work environment as they are expected to have a good communicative competence, PWIM might be the solution to overcome their needs in learning speaking, particularly in communication skill. By applying this model of learning, students are expected to be more confident, active, interactive, and communicative as PWIM offers playful and enjoyable learning activities. The PWIM is designed to meet the challenge of combining students' natural ability and teaching. It is a practical guide to teaching beginning language learners of all ages. In addition to that, PWIM begins with what the students already know and respects their ability to think. It also allows students to hear the words pronounced correctly many times and to develop sight-word vocabulary. Therefore, students are able to be immediately successful as language learners. Having a picture associated with a word helps store information in long-term memory as well as creates a meaningful connection.

This present research of Implemented PWIM in Developing Students Communicative Competence of SMK Islam Wijaya Kusuma is a quantitative research. It aims to determine the significance effect of using PWIM in students' communicative competence. The teachers administer some poster pictures as the students notice and study various pictures and then 'shake out' the words they have seen. They can find out the English words which describe the objects or actions in the picture. Next, the teacher draws a line to the corresponding word or phrase, spell it and have the students to repeat the pronunciation and spelling. They can classify the words according to common letter patterns and begin to internalize phonetic and structural principles. The results of the research contribute most to the increasing of students' communicative competence by encouraging their critical thinking. At the end, they can create a sentence or sentences,

or even a paragraph or paragraphs and can practice those strings of sentences communicatively.

Teaching language sets its goal as the teaching of language use that is appropriate to all contexts of discourse, whether it is in written or spoken interaction. Numerous assessments with an integrated-innovative learning media might be considerable tools in creating a better atmosphere of learning language. In certain respects, teaching language means teaching how to communicate 'meaning' to others. Communicative competence is thus considered as a prerequisite for teachers in delivering the message of the lesson. As affirmed by Richards (2006) that communicative competence includes several aspects of language knowledge, namely: knowledge of using language based on its participants and setting, knowledge of defining language use in different types of texts, and knowledge of maintaining communication with different communication strategies.

Communicative competence could be described as a capability of learner to use the language in various contexts appropriately for achieving the communication goals. Canale and Swain in Celce-Murcia, Dornyei and Thurrell (1995) further proposed models of communicative competence that serve both instructional and assessment purposes into four aspects, namely: (1) grammatical competence, (2) sociolinguistic competence, (3) discourse competence, and (4) strategic competence. Grammatical competence refers to the knowledge of the language code involving pronunciation, spelling system, vocabulary, grammatical rules, and so forth. Sociolinguistic competence is the comprehension of the socio-cultural code of language use involving the appropriate application of using the language in the given situation of talk. Meanwhile, discourse competence is defined as the ability to gather language structures into various types of texts. Furthermore, strategic competence is referred to the learners' ability to use both verbal and non-verbal communication as well as to be a problem solver when communication misleads.

Having had a good communicative competence really needs much effort in its process. One of many aspects of competence that students should have is the competence in literacy. By its consideration, students should start off with the literacy competence in order to enhance the communicative competence for language use. Instructional in the teaching method must be then set up and assigned appropriately to students' needs. In short, teachers must foster students' communicative competence by conducting learning activities with numerous interactive-communicative learning media and teaching methods as they can experience and get involved directly in the interaction.

Among different teaching methods, many researchers believe that the method of using pictures or visual images to teach ESL (English as a Second Language) learners new words benefits English vocabulary acquisition. Jiang and Perkins (2013) stated that substantial number of learning language can be attained by using pictures as its conceptualized protocol used by teachers. In other words, pictures and other visual aids are extremely important in the teaching of a second language to young learners. The efficient and accessible visual aids in the classroom include the teacher, the children, the blackboard or whiteboard, pictures, word cards, real objects and videos.

The PWIM is assigned by using pictures containing familiar objects and actions to elicit words from children's listening and speaking vocabulary. The PWIM has been used in Calhoun's teaching for American children in

the primary school and the kindergarten since the 1970s (Calhoun, 1999), and it has become more and more popular for the other teachers in teaching young ESL learners. As Joyce et al. (2004) stated that PWIM is a young teaching strategy that still makes the cut for inclusion in models of teaching because it is well-based in literacy research and has wide applications. It is successful because this model works upon the natural ways (information processes) that children learn language.

Many scholars have carried out investigation of PWIM in some particular discussions of teaching-learning strategies. Some of them are Swartzendruber (2007), Damanik & Ownie (2013), and Dominic & Mollykutty (2014). These scholars analyzed and investigated PWIM in such discussions in a classroom context for students in various grades, such as “quasi experimental” research by Swartzendruber (2007); “an action research” on student’s achievement on writing task by Damanik & Ownie (2013) and “qualitative descriptive” research on the use of PWIM in vocabulary acquisition by Dominic & Mollykutty (2014).

Swartzendruber (2007) implemented a study on PWIM and vocabulary acquisition. Her quasi-experiment studied on the enhancement of student’s vocabulary acquisition by using PWIM. She examined 35 students of second grader in elementary school, comprised into 14 students for experiment class and 21 students for control class. The experiment class received intervention using PWIM while the control class did not receive the intervention. At the end of her study, the results showed that the PWIM was significantly enhance the students’ vocabulary acquisition.

Another study on PWIM was held by Daminik & Ownie (2013) that concerned on students’ achievement in writing procedure text. Their study was classroom action research that examined 30 students of second year of senior high school. There were two cycles in their study, where the second cycle was the improvement of the first cycle. The data analysis used the Test to Test orientation, which were test I, test II, and test III. The findings showed that the students’ writing procedure text was improved by the use of PWIM.

The latest study on PWIM was also focused on the effectiveness of PWIM in teaching vocabulary acquisition by Dominic & Mollykutty (2014). The study was combining PWIM with different Learning Style. They examined 62 pupils of elementary school by employing pre-test and post-test of experimental study. The data were collected and analyzed by using statistical procedures of Mean, Standard Deviation, ANOVA and MANCOVA. The analysis indicated that the use of PWIM was significantly effective on students’ vocabulary acquisition in the component of Meaning and Spelling.

As designed, PWIM is intended to be a major teaching model component of language arts programs. As the strategy demonstrated nowadays, PWIM would be used throughout the school every year to increase vocabulary as well as to improve sentence and paragraph construction and spelling. The specific lesson presented is one part of the ongoing teaching strategy. It would be presented in parts, over days or weeks. The example in models of teaching was a cycle of twenty-two sessions of about fifty minutes long.

There are some reasons as follows for the increasing popularity of the teaching model. According to the PWIM, necessarily, learners study various pictures and then ‘shake out’ the words they have seen. The phrase ‘shake out’ means to let children find out the English words which describe

the objects or actions in the picture. After that, the teacher draws a line to the corresponding word or phrase, spells it and asks the students repeat the pronunciation and spelling. According to Joyce, Weil and Calhoun (2009), with practice, experience, and modeling, learners will develop a better understanding of the conventions of English because they can classify the words according to common letter patterns and begin to internalize phonetic and structural principles.

The implemented PWIM really depends on the pictures selection as models used in stimulating students’ inductive thinking as Joyce et al. (2004) states that, firstly, the PWIM is designed to meet the challenge of combining children’s natural ability with teaching. Besides, it supports the research about how literacy is acquired and on research underlying several of the theories of learning with pictures. Secondly, the model is designed to adapt to language arts curriculums for primary level beginning readers, for older beginning or for early-stage readers. Its essence is to help learners inquire into language and learn to build generalizations about how letters, words, phrases, sentences and longer text work together. The model also includes a set of tools to assist teachers and learners to make progress and to study it. In addition to emphasizing the usage and function of the PWIM, they also provide the rationale and structure of the PWIM. Furthermore, Joyce, et al. (2004) also affirmed that the PWIM is said to be effectively implemented in the classroom context if it requires an action research frame of reference. Also, teachers should combine the theory and rationale structure of PWIM itself onto students’ inductive thinking.

The pace of lessons during a picture-word cycle depends on the reading level of the learners and the curriculum objectives of the teacher. Nevertheless, after the categorization process of words, learners are required to generate sentences about the picture and then, the teacher selects learners’ sentence categories to write a well-organized paragraph, sharing their thinking about how they use the ideas in the sentences. By time the students finish the lesson through several instructional PWIM, their writing competence in constructing the paragraph will increased. Calhoun (1999) systematically addressed PWIM as a practical guide to teaching beginning language learners of all ages that allows students’ needs in teaching and learning process particularly of sight vocabulary learning.

With the definition, students are encouraged to: (1) build their ability which are building sight reading and writing vocabulary, (2) classifying words and sentences, (3) thinking inductively, and (4) developing their own titles, sentences and paragraphs about their pictures. The instructional sequences of the PWIM applied in the classroom context is based on Calhoun (1999) who describe into several parameters, namely: (1) select a picture; (2) ask students to identify what they see in the picture; (3) label the picture parts identified; (4) read and review the picture word chart aloud; (5) ask students to read the words using the lines on the chart if necessary and to classify the words into a variety of groups; (6) read and review the picture word chart; (7) add words, if desired, to the picture word chart and to the word banks; (8) lead students into creating a title for the picture word chart; (9) ask students to generate a sentence, sentences, or a paragraph about the picture word chart; and (10) read and review the sentences and paragraphs.

Selecting a picture is one of the important issues in PWIM. According to Calhoun (1999), the best practice for classroom teachers is to use images that are large enough so

that the details are easily viewed and identified by students. The photo has to be at least 20" x 30" which is the standard size PWIM image. Moreover, there are other criteria, which are: (1) it should be a real photograph that clearly depicts one large scene, not multiple scenes or mini photographs in a collage; (2) the proportions of items in the photograph should not be distorted; (3) there should be a main feature and then many details so many words can be shaken out or located by students; (4) colored photos or black and white pictures will work, but make sure the images are clear; (5) be sensitive to students' lives when selecting posters; (6) there should not be captions or titles printed on the photograph, but signs are acceptable; (7) photos should reflect attributes of a concept being studied, but do not need to be an example of the concept itself. For example, a poster of a camel in a desert area can support a unit on animal habitats as easily as a poster of elephants on a meadow.

Regarding the principles of the PWIM, Joyce et al. (2004) stated that a major principle of PWIM is to build on children's growing storehouse of words and syntactic forms and to accelerate the transition to written forms. An essential principle of the PWIM is that the model respects the children's language development; their words are used, and their ability to make associations is cultivated. One of the advantages of the PWIM is that it approaches the development of sight vocabulary directly. At first, children read and spell the words when they are 'shaken out' from the picture. Later, these words are printed on word cards, so they can look at them. Next, the teacher can hand down for group instruction so that learners can also have their own vocabulary cards. They classify these words according to different word classes, or word meanings; they look up the picture dictionary created previously on the whiteboard or chart paper to check their understanding and to memorize the meaning of the words. They can keep their word cards in word boxes, consulting them as they wish and eventually use them in generating sentences, reading, and writing (Joyce et al., 2004).

The PWIM cannot only be used for teaching the correct spelling or pronunciation of the words learners have already known, it can also be used for teaching new vocabulary. It is stated that PWIM induces learners to classify their new words, building the concepts that will enable them to obtain the meaning of words they have not seen before. When learners work with their words, the categorization procedure occurs. The categorization procedure can be seen as a natural process for extension of the word family for ESL learners. Cameron proposes, if categorization is responsible for certain meta-linguistic abilities then it would be reasonable to combine this meta-linguistic abilities with inductive learning ability. Hence the acquisition of new words would be more remarkable. Students will develop word families and learn that.

METHODS

The research basically aimed at determining the significance effect of implemented PWIM in developing students' communicative competence of SMK Islam Wijaya Kusuma Jakarta. The students' communicative competence was measured quantitatively by comparing PWIM to conventional model. This research approach was a quantitative experimental research. There are two variables of the research, there were PWIM and students' communicative competence. The students were divided into two groups, there were, experiment class and control class.

The PWIM was employed in the experiment class for the intervention while the conventional model was implemented in the control class as the students have already used. Once the PWIM was assigned, the writers also overview the student's motivation and creativity as the impact of the implemented PWIM in the learning process.

The population of this research was all the 11th grade of Vocational High School Students of SMK Islam Wijaya Kusuma, Jakarta, majored in office administration in the academic year of 2015/2016. From the population of 103 students, 47 students were chosen randomly as the sample. The sample was divided into two groups as one class of experiment group consists of 25 students, and one other class as the control group consists of 22 students. Each class was analyzed based on their scores of post-test poster picture and their answers of the questionnaire.

RESULTS AND DISCUSSIONS

Based on the results of the research data collection, the writers conducted a descriptive analysis to inform a general data of the research before the intervention. The analysis of data descriptive can be performed in Table 1.

Table 1 Descriptive Data

No.	Description	Control Class	Experiment Class
1	Highest Score	82	87
2	Lowest Score	75	75
3	Mean	77,45	79,20
4	Median	77	78
5	Mode	75	75
6	Standard Deviation	5,50	15,33
7	Variance	2,34	3,92

Table 1 present the general information performs the data of control class and experiment class. The control class describes the highest score = 82; the lowest score = 75; the mean score = 77,45; the median score = 77; and the mode score = 75. Meanwhile, the score of the experiment class describes the highest score = 87; the lowest score = 75; the mean score = 79,20; the median score = 78; and the mode score = 75.

As the pre-condition of the data, this research should fulfill the requirements of the research analysis which are normality test and homogeneity test. Based on the statistical calculation, the results show that the data is normal distributed and homogeneity. The information can be seen in Table 2.

Table 2 Normality Test

	Control Class	Experiment Class
$L_{observed}$	0,141	$L_{observed}$ 0,160
L_{table}	0,183	L_{table} 0,173

According to statistical calculation of Liliefors, the control class and the experiment class show that $L_{observed}$ are lower than L_{table} which means that both classes have normal distribution.

Besides the normality test, the data also shows the homogeneity data as seen in Table 3.

Table 3 Homogeneity Test

	Control Class	Experiment Class
\bar{X}	77,45	79,20
S	5,50	15,33
V	2,34	3,92

By comparing the variance of experiment class and the control class, the statistical data shows that F_{observed} is 1,76 and F_{table} is 2,06, which is F_{observed} is lower than F_{table} . It means that the data of control class and experiment class are homogeny.

Since the data shows the normality and the homogeneity, the research can be continued by the hypothesis analysis. The research began with implemented PWIM on experiment class, while the control class was given the same lessons with conventional method. After eight times meeting, a post poster picture (Figure 1) assignment was given to both classes.



Figure 1 PWIM Poster Picture

The results of both classes were then being collected and examined. Based on the research findings, the data shows the students' communicative results as presented in Table 4.

Table 4 Result Data

No.	Description	Control Class	Experiment Class
1	Highest Score	77	89
2	Lowest Score	70	79
3	Mean	72,45	82,88
4	Median	72	82
5	Mode	70	79
6	Standard Deviation	5,50	11,36
7	Variance	2,34	3,37

The results show that the experiment class performed better than the control class. In the experiment class, most students were able to elicit their thoughts to words and improve their vocabulary by using the poster picture. Based on the poster picture, the students could also easily construct sentence by sentence and communicate the sentences to their friends in front of the class. Meanwhile, in the control class, the students were mostly ashamed and unable to elicit

their thoughts to words. The students hardly constructed their sentences and only some students could communicate the sentences to their friends. In this way, the students' performance were examined and scored. With the collected data, then, the data was analyzed by the t-test two tailed analysis. This statistical analysis showed that $t_{\text{observed}} = 3,92$ higher than $t_{\text{table}} = 2,02$. Based on the hypothesis analysis criteria as follows:

Ho: $\mu B1 = \mu B2$

(There is no significant effect of using picture word model to students' communicative competence).

H1: $\mu B1 \neq \mu B2$

(There is a significant effect of using picture word model to students' communicative competence).

It can be said that the null hypothesis is rejected and the research hypothesis is accepted. It means that there is a significant effect of using PWIM to students' communicative competence.

Based on the result data and the hypothesis analysis, it can be seen that the experiment class reveals better result than the control class. The intervention of PWIM was examined to be the preferable support to students in English learning. This PWIM has been the new experience for students and proven in enhancement of the students' comprehension.

By comparing the data in experiment class and the control class, PWIM showed the effectiveness on students' communicative competence. The data showed that the experiment class has better result than the control class in the highest score, lowest score, mean, median, and mode. Besides, with the t-test analysis, the result showed that t_{observed} has higher value than t_{table} which means there is a significant difference between using the PWIM and conventional model on students' communicative competence.

It can be concluded that the null hypothesis is rejected and the research hypothesis is accepted. It means that there is a significant effect of using PWIM to students' communicative competence.

CONCLUSIONS

From the hypothesis test and discussion of the findings, PWIM is said to be effective in developing students' communicative competence in SMK Islam Wijaya Kusuma Jakarta. This conclusion comes from the results of hypothesis analysis which define the significant difference in the scores of students' communicative competence criteria. The results show that the experiment class performed better than the control class. In each criteria of the communicative aspect, the experiment class achieves higher score than the control class. In other words, students' communicative competence significantly increases after PWIM was assigned. The PWIM design works well in developing students' communicative competence as it is proven by the fact that students paid more attention when dealing with the several classroom activities in the teaching-learning process. Furthermore, PWIM seems to be the teaching model that could increase both students' motivation and creativity. This can be overviewed from students' interaction in a more communicative learning circumstance in a classroom context.

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