

A CASE STUDY: IMPROVING STUDENTS' SPEAKING ABILITY THROUGH PICTURES IN SMK SWASTA TAMAN PENDIDIKAN

Mungkap Mangapul Siahaan

Lecturer Faculty of English Education, the University of HKBP Nommense Pematangsiantar

ABSTRACT

This research agrees with the finding data which is improving students' speaking ability through series pictures in speaking lesson in SMK Swasta Taman Pendidikan on Jalan Radjabin Purba, SH Pasar I-A Perdagangan, Kecamatan Bandar – Kabupaten Simalungun. An action research class is conducted to define the solution of the improving students' achievement in speaking. Through this research, the researcher shared the result of the students speaking capabilities after using series pictures. The datum shows the comparison between students' speaking ability using pictures and without using pictures. The design of this research was the experimental quantitative research which is aim to know the effect of the series pictures in the students speaking learning activity. In collecting the data of the research, the researcher had to do three steps as pre-test, treatment and post-test. The result of the tests shows that students' speaking ability is improved through using pictures series.

Keywords: Improving, speaking, pictures, ability

I. INTRODUCTION

Teachings by using serial pictures are very common in English lesson. Many teachers are being helped by the teaching media to explain their lesson to their students. Picture is one of media that can help teacher draw students' interest and improve students' motivation to learn because pictures assist students to develop creativity and increase thinking ability (Canning-Wilson, 2001). By using pictures, it is believed that teaching and learning process will be more effective, teaching learning situation will be more attractive, and both teacher and students get advantages from the use visual media in classroom.

According to Harmer (2001: 134) there are some uses of pictures in teaching speaking such as: first, drills. It is useful for drilling grammar, sentences, and practice vocabularies. It is in line with Stevick (1982: 107), states that visual aids are used to give cues in some kinds of drill. Second is communication. Pictures provide variety of communication activities. Third is understanding. Students will get their understanding about something or something by looking the picture. It is also easy to check students' understanding by giving them a question and ask them to choose the pictures as the answer. Fourth is ornamentation. It means that picture can be a tool to appeal students' interesting. Fifth is prediction. Pictures show the stories and it can help students to guess what is happening in the pictures. Last is discussion. There are many questions which occurred in the pictures.

Furthermore, through pictures, fun learning can be created and speaking activity will not be seen as difficult as students might have thought. In relation to the teaching and learning, pictures are potential source in the transferring information. In the other words, picture can become a bridge to transfer knowledge from the teacher to the student. According to Canning-Wilson (2001:91), pictures are important since they facilitate students understanding. Furthermore, he explained that for most people, the mental image of what they saw had greater impact than auditory input. Subsequently, the problem statements investigated are as:

1. Is using pictures effective to improve speaking ability of students grade XI in SMK Swasta Taman Pendidikan?
2. What do the students grade XI in SMK Swasta Taman Pendidikan respond in teaching speaking through pictures?

The research aims to discover the effectiveness of serial pictures to improve students' speaking capability. How and why the serial pictures can develop students teaching

capability. The serial pictures help teachers to improve students' responses in speaking lesson. The findings are significant for the development of serial pictures to improve students' speaking capability

II. RESEARCH METHOD

Research Design

The design of this research was an action research. Theoretically, an action research should be undertaken in the class, together with the process of teaching and learning. According to Kunandar (2008:45) action research is defined as an action research undertaken by teachers as well as class researchers or jointly with others (collaboration) with a design, implement and reflect the collaborative and participatory action that aims to improve or enhance the quality of the learning process in the classroom through a specific action in doing a cycle. Action research objective is to solve the real problems that happen in class and improve teachers' real activity in professional development activities.

The Step of Action Research

According to Kemmis and Mc Taggart (1998:74) an action research is a research method which is conducted in the four moments as: as planning, acting, observing and reflecting. This research moment existed interdependently and followed each other in a spiral or cycle. The four moments are:

a. Planning Stage

Firstly, the researcher had to do preliminary study by identifying the problem in the classroom. After that the researcher formulated planning to conduct the research based on the problem above. In broader definition, this planning dealt with the planning of the researcher to conduct this research.

b. Action Stage

Action happens when the plan is put into the place and is hoped for an improvement. In this step, the researcher tried to implement the plans of actions that had been stated previously.

c. Observing Stage

This action ideally should be done in pairs between the researcher and the observer. This way is considered very ideal to reduce the subjectivity of the data collected.

d. Reflecting Stage

The researcher reflected on their findings to more accurately define his thematic concern. This reflection would also include self-reflection by the participants.

Population and Sample of the Research

Based on the theory of Arikunto (2006), the population of the research is in SMK Swasta Taman Pendidikan on Jalan Radjamin Purba, SH Pasar I-A Perdagangan, Kecamatan Bandar – Kabupaten Simalungun. According to Arikunto (2006), sample is the proposition of a population which will be observed. Sample is the group on whom the data is collected and for whom comparisons are made (Fraenkel and Wallen, 1990). The sample of the research is the students grade XI in SMK Swasta Taman Pendidikan on Jalan Radjamin Purba, SH Pasar I-A Perdagangan, Kecamatan Bandar – Kabupaten Simalungun

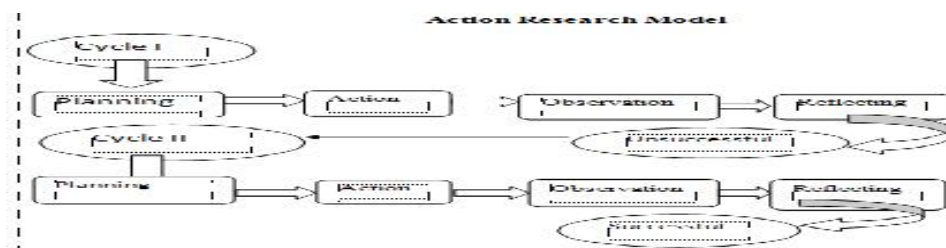


Figure 1. Action Research Model

The procedure of the data collection was conducted in two cycles. In the first meeting of cycle I, pre-test have administered to identify the basic knowledge about the students' reading comprehension. Cycle I consisted of two meetings. Cycle II consisted of two meetings. And each cycle was compromised into four steps, they are: planning, action, observation, and reflection. The researcher was also acted as the teacher in the process of the research.

The validity of the test

Validity is one of the characteristic of a good test. There are same kinds of validity. Heaton (1979:153) defines that the validity of a test is the extent to which it measures what it is supposed to measure and nothing else. Every test whether it be a short, informal classroom test or a public examination, should be as valid as the constructor can make it.

To find out the validity of the test, the researcher compares the result of the test with the result of semester test by using the formula of coefficient correlation product moment.

$$r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{(n \sum x^2 - \sum x^2)(n \sum y^2 - \sum y^2)}}$$

Where:

r_{xy} : The confidence of correlation between rater

N : the number of sample

$\sum xy$: total sum of x and y

$\sum y$: the score of first scorer

$\sum x$: the score of second scorer

Reliability of the test research

Reliability is one the characteristics of the good test. Reliability refers to the consistency of the measurement. To obtain the reliability of the test, the researched used Spearman-Brown Method in Arikunto (2006: 180) as follows:

$$r_{11} = \frac{2 \cdot r^{1/2} \cdot 1/2}{1 + r^{1/2} \cdot 1/2}$$

Where:

r_{11} = Coefficient reliability

$R^{1/2} \cdot 1/2$ = Coefficient between the two test

The value of reliability is as the following:

0.1 – 0.40 = the reliability is low

0.41 – 0.70 = the reliability is significant

0.71 – 0.90 = the reliability is good

0.91 – 1.00 = the reliability is very good

Technique of Analyzing Data

Having got the data from pre-test, they are analyzed and processed by using statistic calculation of T-test (Arikunto 2006: 306).

The formula as follows:

$$t = \frac{Md}{\sqrt{\frac{\sum x^2 d}{N(N-1)}}}$$

t = T-test

Md = Mean of differences, the average score from the differences gained scores Between I variable and II variable, which are calculated with formula:

$$Md = \sum \frac{D}{N}$$

$\sum^D$ = Total score between I variable (X variable) and II variable (Y variable).

And D is gained with formula; $D = Y - X$

N = Number of cases

$\sum x^2 d$ = The standard deviation from differences between score of X variable and Y Variable, which is gained with the formula:

$$\sum x^2 d = \sum d^2 - \frac{(\sum d)^2}{N} \text{ if: degree of freedom with formula: } N-1.$$

III. DATA ANALYSIS AND RESEARCH FINDING

This chapter exposes the process of getting the result of the data through the analysis of data. To analysis the data, the researcher used a method which is explained before in the previous chapter. The researcher explained the data and the data analysis as it is shown below:

The Data Analysis of Mark the Students' procedure speaking

The data is given to the students in a test score based on Reid (content, organization, vocabulary, language, and mechanic), the data resulted were from cycle 1 and cycle 2, as:

1. The score of Cycle 1 in pre-test, the lowest pre-test is 64. There was one student got the score, there were four students got 60 score there were four students got 55-57 score and there were six students got 50-53 score, there were four students got 48 score, there were five students got 40-45 score. In the pre-test, the students' score were very poor.
2. The score of Cycle 1 in post-test, the lowest post-test was 70, one student got the score, there were two students got the score 68, there were two students got 65-66 score, there were fifteen students got 56-60 score, there were four student got 48-55 score. In the post-test, the students were fair to make procedure conversation.
3. The score of Cycle II in pre-test, the highest pre-test was 72, one student got the score, there were seven students got the score 60-70, there were thirteen students got 53-59 score. In the post-test, the students were fair to make procedure conversation.
4. The score of Cycle II in post-test, the highest post-test was 80, one student got the score, there were six students got the score 70-78, there were seventeen student got 60-69 score. There was one student got 59 score. In the post-test, the students were fair to make procedure conversation.

The Data Analysis of the Students' score Speaking

In evaluating the sentences structure, the researcher gave maximum score 80-100 and minimum score is 0. The lowest score of the pre-test is 40 and highest is 64, while the lowest score of post-test is 48 and the highest score is 70. It means that ability of the students in post-test is more increase than in pre-test. The lowest score pre-test is 53 and highest is 72, while the lowest score of post-test is 59 and the highest score is 80. It means that ability of the students in post-test is more increase than in pre-test.

The Level of Study Ability

In order to find out the level of ability of the students, the researcher found out the mean and standard deviation firstly. The mean is composed by adding a list score and the dividing by the number of score. The standard deviation is a measure of the spread of the score. The score of pre-test and post-test cycle II is higher than the score of pre-test and post-test of Cycle I. It means that the series picture significantly improve the students' speaking capability.

Research Cycle

As it was stated on the above sub chapter that the researcher conducted the cycle twice, it was because the result of the analysis or observation process showed that the students had already got a bad process in terms of their speaking ability especially in speaking procedure text. The researcher was as the teacher to the students grade XI in SMK Swasta Taman Pendidikan on Jalan Radjain Purba, SH Pasar I-A Perdagangan, Kecamatan Bandar – Kabupaten Simalungun and the students were as the subject of the study. Pre-test and post-test conducted by using a simple conversation of a procedure text using series of pictures. The cycle consists of four steps as the following:

Cycle I

The First Meeting

The first meeting was conducted on February 10, 2020. The English subject was held at 10.25 am to 11.45 am. In the opening session, the teacher greeted the students and the students replied it. The greeting was expressed by the teacher was the simple one in which the students had been familiar with it. The following was the opening interaction of the teacher and the students:

Teacher : *“Good Morning class?”*
 Students : *“Good morning Miss.”*
 Teacher : *“How are you all?”*
 Students : *“I am fine, thanks. And you?”*
 Teacher : *“I am good. Thank you”*

After giving the greeting to the students, then the teacher told the students about the topic that they would study that day. After knowing the topic they would learn procedure text, the students looked glad. The teacher started the conversation and tried to build a live class.

Before the teacher finished giving the details information about procedure text, the teacher gave stimulation by asking the students some questions. It was done in order to help the students understanding the material that would be given in the next section. Here was the conversation:

Teacher : *“Kalian tahugak Pop Mie?” (Do you know pop Mie?)*
 Students : *“Tahu mam.” (We know miss)*
 Teacher : *“Okay, can you tell me a sample of Pop Mie?”*
 Students : *“Indomie, Supermie, Sarimie”*
 Teacher : *“Bagus, kalaucaramembuatnya, kalian tahugakbagaimanacaramembuatnya? (Good, so do you know how to make it?)*
 Students : *“Tahu mam. (We know mam.)”*
 Teacher : *“Tahuapanamanya text tentangcaramembuat sesuatu?”*
 Students : *“Procedure mam?”*
 Teacher : *“Pinter. Great. So, today we are going to study about procedure.”*

When the stimulation about the material finished, the teacher started to explain it. But before explaining the material, the teacher asked the students about procedure text whether they still remembered or not. Because when they were in the class seven, they had got it. When the teacher asked them about procedure text, some of the students looked excited in answering the question but there were also the students who kept silent and they just listened to their friends. Here was the conversation between the teacher and the students:

Teacher : *“What is procedure text?”*
 Students : *“Cara membuat sesuatu mam.” (How to make something miss).*
 Teacher : *“Bagusapamalnya. (Very good, what is the example?”*

- Students : *Cara membuat pop mie, layang-layang mam (how to make a Pop Mie, kite mom)*
- Teacher : *“Okay, good but that is the example of procedure text. Is there any students who can answer the definition of procedure text? Bagus, tapi itu contohnya, bagaimana dengan pengertian dari procedure text sendiri, ada yang tau? Please raise your hand!”*
(Good, but it is just an example, what is the definition of procedure text).
- Students : *Cara membuat sesuatu miss (how to make something mom).*
- Teacher : *Great.*

The data above showed the simple conversation about explaining the material and for the students who answered the question correctly gave good response and the others were not.

Then the teacher took over the situation and started to explain the definition of procedure text. After explaining the material, the teacher gave the question to the students then the students answer it.

The Second Meeting

The second meeting was conducted on February 17, 2020. The English subject was held at 12.00 pm to 01.25 pm. The opening session was almost the same with the first meeting. The teacher greeted the students, and then checked the attendance list. One of the differences in this section was the teacher reviewed the material that had been given in the previous meeting. It was the components of procedure text such as the generic structure and language features. And for this moment, the teacher needed 10 minutes.

Afterward, the teacher asked the students to prepare the picture series which had been given meeting because that day would continue the lesson and still used that picture series as the media. The next step was learning how to write procedure text.

The teacher asked the students to look at the picture with the title *How to make a Pop Mie*. After explaining the picture, the teacher asked to the students to make a sentence. The sentence which has made should have been appropriate with the tense that had been explained at the beginning part of the lesson and should have based on the picture. Here was the conversation between the teacher and the students when asking the students to make a sentence:

- Teacher : *“Okay, Any question about the picture?”*
- Students : *“No, Miss.”*
- Teacher : *“Good. Now, please make a sentence about the picture? Buat kalimat berdasarkan gambar. Tense yang digunakan harus sesuai dengan tenses yang sudah dijelaskan tadi. I will give you 25 minutes to make it. Sayaberi kalian waktu 25 menit untuk membuatnya. Any question?”*
- Students : *“No, Miss.”*
- Teacher : *“Good, you can do it now!”*
- Students : *“Yes, Miss.”*

The students looked serious to make a sentence. They were very busy with their dictionary to look for some words. The teacher gave 25 minutes to produce it. While the students were making a sentence, the teacher walked around to help them.

In the conversation process, the teacher walked around to know the groups' work. The students asked some questions to the teacher and the teacher answered the questions. There were a lot of difficulties which had been faced by the students such as making a sentence by using simple present tenses and asking the certain words by using to infinitive and conjunction such as: and, then, next, so, after, before and finally. Although they had used the

dictionary, the students preferred to ask the teacher about the difficult words. The teacher also checked the students' work and would correct it if there was mistake.

The following was the conversation between the teacher and the students. It was done because the students could not be able to make a sentence. The teacher came to the student's table and helped them.

- Student 1 : "Miss"
 Teacher : "Yes, Any difficulties?"
 Student 1 : "Miss, kayak giniya?" (miss like that)(The student showed the teacher a sentence)
 Teacher : "Let me see. Inisalah. Cobalihatrumus simple present tense. Verb yang digunakan verb berapa?" (This is false, can you see the formula of simple present tense, what is the verb type?)
 Student 2 : "Verb 1, Miss."
 Teacher : "Yes, so how should it be?"
 Student 1 : "Berartiini (pointed the word) dirubahke verb 1?"
 Teacher : "Betul, (good)"
 Student 1 : "Jadiginiya miss?"
 Teacher : "Yes, very good. Any question?"
 Student 3 : "No. miss. Thank you"
 Teacher : "You're welcome"

During the conversation process of the procedure picture, the students got a lot of difficulties. Mostly, they had difficulty in making sentence by using simple present tense. It was caused the students did not have enough vocabularies and did not remember the pattern of simple present tense. On the other hand, they got difficulties in producing sentence because they also did not know the present form of some verbs. Therefore, the teacher asked them to use dictionary.

At the end of the meeting, the teacher told to the students to submit their work. Then, all the groups submitted their work on the teacher's table. Before the teacher left the class, reminded the students to bring the dictionary for the next meeting.

Cycle II

This cycle was conducted in two meeting. It was started on March 16, 2020. This second cycle was conducted because the students' score were still under the standard 68 and the students still found problem in procedure text.

The First Meeting

The first meeting was conducted on March 16, 2020. The English subject was held at 12.00 pm to 01.25 pm. The activities which were done were the same like the first cycle. The teacher greeted the students, check the attendance list by calling the students' names one by one.

Before continuing the material, the teacher showed the errors of the students in their papers that had been submitted in first cycle last week. The teacher explained the errors in general because mostly the student's errors were in making sentences by using simple present tense and in mechanics. The teacher explained it again. The teacher asked the students to listen her carefully. While the teacher was explaining the simple present tense, he reminded the students to pay attention with the use of punctuation such as coma and full stop. There was also the important one and it was about the capital letter, using to infinitive and conjunction.

In this meeting the teacher only give more explanation about procedure text especially in mechanic that dominated by error of spelling, about the capital letter, using to infinitive and conjunction.

Then the teacher asks the students write the procedure text about “How to make coffee mix”. The teacher walked around to the students table to check whether they need help or not. In fact, there were many students who needed help. The teacher was patient in helping them.

The Second Meeting

The third meeting was conducted on March 23, 2020. The English subject was held at 12.00 pm to 01.25 pm. The activities which were done were the same like the previous meeting. The teacher greeted the students, check the attendance list by calling the students' name one by one.

In this section, the teacher showed the errors which done by the students in their paper which was submitted in the second meeting. The teacher showed the students' errors. Then, the teacher explained it and corrected the mistakes. The students listened carefully. After showing and explaining the mistakes, the teacher gave the chance the students to ask. But, there was no one student who raised their hand. Here was the conversation between the teacher and the students:

- Teacher : “Okay students, before continuing the material. I will show you some mistakes that you’ve done in your paper. Please, listen to me!”*
- Students : “(kept silent and listened the teacher explanation)”*
- Teacher : “Mostly, the mistake that you’ve done was making sentence, especially if it uses simple present tenses.”*
- Then the teacher explained clearly how to write those sentences correctly.*
- Teacher : “So, please remember it! If you want to make a simple present tense, please put verb 1. do you understand?”*
- Students : “Yes, Miss.”*

After explaining, the teacher continued the lesson. The teacher distributed the copies of picture series with the title “How to make coffee mix” to the students. In this meeting, the teacher asked them to produce a procedure text individually, before making a procedure text, the teacher and the students explain the picture series altogether. They shared the opinion each other about the information that they could get from the picture series. It would make the students easier in producing text. The students very enjoyed with this situation. They comprehended the picture series well so it made them enthusiastic in showing up their imagination about it. The following was the process of discussion which was done by the teacher and the students:

- Teacher : “Okay, students. Please look at the picture series!”*
- “What is it?”*
- Students : “How to make coffee mix”.*
- Teacher : “Yes, you’re right. Can you see the picture clearly?”*
- Students : “Yes, Miss.”*
- Teacher : “Good. Let’s see the picture. Do you think what kind of generic structure is it?”*
- Students : (thinking) “itu Miss, infinitive Miss, conjunction miss and Present Tense, (that is to infinitive, conjunction and present tense miss)”.*
- Teacher : “So, apa yang benarnya (so, what is the correct one)?”*
- Students : “infinitive Miss.”*
- Teacher : “Good”*

The next was to produce a procedure text. The teacher asked the students to prepare their dictionary because he allowed them to look for the difficult word in it. During the conversation process, the students looked confused. There were some students who did not know what they should have done and asked to other friend. In this case, the role of the teacher was needed. The teacher walked around to the students table to check whether they need help or not. In fact, there were many students who needed help. The teacher was patient in helping them. It was done by the teacher during the process of conversation the procedure picture. Mostly, the students got the difficulties in making a sentence by using simple present tense. But, for the generic structure, they were able to arrange the procedure text into a good procedure text. Time showed that it was 25 minutes left. The teacher told it the students and asked them to finish their conversation.

The Data Analysis

The analysis data was taken from a computation result of the test; it is aimed at finding out the significant improving of using series of picture and students ability in creating a conversation of a procedure picture.

Mean and Standard Deviation of Cycle I

$$N = 25, X = 1288$$

$$\begin{aligned} \text{a. Mean} &= \frac{\sum X}{N} \\ \text{Mean} &= \frac{1288}{25} \\ \text{Mean} &= 51.52 \end{aligned}$$

From the data, the researcher found the mean score; the mean score was calculated by dividing the total score with number of sample 25 students it was 51.52

$$\begin{aligned} \text{b. Standard deviation} \\ \text{SD} &= \frac{1}{N} \sqrt{N \cdot \sum X^2 - (\sum X)^2} \\ \text{SD} &= \frac{1}{25} \sqrt{25 \cdot 67234 - 1288^2} \\ \text{SD} &= \frac{1}{25} \sqrt{1680850 - 1658944} \\ \text{SD} &= \frac{1}{25} \sqrt{21906} \\ \text{SD} &= \frac{1}{25} \cdot 148.00 \\ \text{SD} &= 5.92 \end{aligned}$$

Therefore standard deviation of the test is 5.92

Mean (X) = 51.52

Standard deviation (S) = 5.92

Level Ability	The Criteria
High	(X) + S 51.52 + 5.92 57.40
Medium	(X) – S : (X) + S 51.52 – 5.92 : 51.52 + 5.92 45.6 : 57.40
Low	(X) – S 51.52 – 5.90 45.6

Table 1. The criteria level ability of students in Cycle I

From the criteria level of the students' ability, the researcher made classification of it. He calculated the percentage from criteria of the students' Score. By doing so, the researcher will know the students ability in a conversation of a procedure pictures in Cycle I. To find out the percentage of criteria level ability of the students:

$$P = \frac{f}{N} \times 100 \%$$

Where : P : percentage
F : frequency number of the students
N : total number of sample

Level Ability	The criteria	The Number	Percentage
Highest	More than 57. 44	16	64 %
Medium	Between 45.6– 57.44	9	36 %
Lowest	Less than 45. 6		
Total		25	100 %

Table 2. The classification of level ability of the students

From the table above, can be seen that the ability of the students is highest level in which the students get more than 57. 44 are 16 students. The students who are at medium level get the score between 45. 6 – 57. 44 are 9 students and none of them who get lower level.

Mean and standard Deviation of Cycle II

N= 25, X = 1517

a. Mean = $\frac{\sum X}{N}$
Mean = $\frac{1517}{25}$
Mean = 60. 56

From the data, the researcher found the mean score; the mean score was calculated by dividing the total score with number of sample 25 students it was 60. 56

b. Standard Deviation
 $SD = \frac{1}{N} \sqrt{N \cdot \sum X^2 - (\sum X)^2}$
 $SD = \frac{1}{25} \sqrt{25 \cdot 92805 - 1517^2}$
 $SD = \frac{1}{25} \sqrt{2320125 - 2301289}$
 $SD = \frac{1}{25} \sqrt{18836}$
 $SD = \frac{1}{25} \cdot 137.24$
SD = 5. 48

Therefore standard deviation of the test is 5. 48

Mean (X) = 60, 56		Standard deviation (S) = 5, 48	
Level Ability	The Criteria		
High	(X) + S		
	60. 56 + 5. 48		
	66. 04		
Medium	(X) – S : (X) + S		
	60. 56 – 5. 48 : 60. 56 + 5. 48		
	55. 08 : 66. 04		
Low	(X) – S		
	60. 56 – 5. 48		
	55. 08		

Table 3. The criteria level ability of students in Cycle II

Level Ability	The criteria	The Number	Percentage
Highest	More than 66.04	13	52 %
Medium	Between 55. 08 – 66. 04	12	48 %

Lowest	Less than 55. 08	–	
	Total	25	100 %

Table 4. The classification of level ability of the students

From the table above, can be seen that the ability of the students is highest level in which the students get more than 66. 04 are 13 students. The students who are at medium level get the score between 55. 08 – 66. 04 are 12 students and none of them who get lower level.

The validity and Reliability

The Validity of the test Cycle I

To ensure that the test administered in this research, content validity is used. Then test was validity of the purpose of the test has sufficient accordance that correlate with ability to be test.

$$r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{(n \sum x^2 - \sum x^2) - (n \sum y^2 - \sum y^2)}}$$

Where:

r_{xy} : The confidence of correlation between rater

N : the number of sample

$\sum xy$: total sum of x and y

$\sum y$: the score of first scorer

$\sum x$: the score of second scorer

$$r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{(n \sum x^2 - \sum x^2) - (n \sum y^2 - \sum y^2)}}$$

$$r_{xy} = \frac{25.77028 - (1288)(1482)}{\sqrt{(25.67234 - 1288)(25.88462 - 1482)}}$$

$$r_{xy} = \frac{192700 - 1908316}{\sqrt{(1680850 - 1668944)(2211550 - 2196324)}}$$

$$r_{xy} = \frac{16884}{\sqrt{(11905 - 15226)}}$$

$$r_{xy} = \frac{16884}{\sqrt{(181280756)}}$$

$$r_{xy} = \frac{16884}{12705,04}$$

$$r_{xy} = 0.75$$

The validity of the test is 0.75 it the means that the validity of test given is high

From the calculation it can be seen that there is the correlation of two variables in the test. (Value/ r_{xy} : 0.75) it showed that the index correlation is high, the validity of the text is high: it mean that the test is validity. So the test that the researcher used is valid.

r_{xy}	Validity Specification
800 – 1.00	Very high
600 - 0.800	High
0.400 – 0.600	Fair
0.200 – 0.400	Low
0.00 – 0.200	Very low

Validity of Test Cycle II

The computation of the reliability shows the test is reliable when it is between 0, 00 – 1, 00. The following is the range of reliability based on Arikunto is statement:

$$r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{(n \sum x^2 - \sum x^2) - (n \sum y^2 - \sum y^2)}}$$

$$r_{xy} = \frac{25.102617 - (1517)(1679)}{\sqrt{(25.92805 - 1517)(25.113585 - 1679)}}$$

$$r_{xy} = \frac{2565425 - 2542492}{\sqrt{(2320125 - 2301289)(2839625 - 2819041)}}$$

$$r_{xy} = \frac{22933}{\sqrt{(18836.20584)}}$$

$$r_{xy} = \frac{22933}{\sqrt{387720224}}$$

$$r_{xy} = \frac{22933}{19690.61}$$

$$r_{xy} = 0.85$$

The validity of the test is 0.85 it means that the validity of test given is high

From the calculation it can be seen that there is the correlation of two variables in the test. (Value/ r_{xy} : 0.85) it showed that the index correlation is high, the validity of the text is high: it mean that the test is reliability. So the test that the researcher used is valid.

r_{xy}	Validity Specification
0.800 – 1.00	Very high
0.600 – 0.800	High
0.400 – 0.600	Fair
0.200 – 0.400	Low
0.00 – 0.200	Very low

Reliability of the Test in Cycle I

In this research, to find out the reliability of the test the researcher will use the spearman-Brown formula (Arikunto, 2006:93):

$$r_{11} = \frac{2 \cdot r^{1/2} \cdot 1/2}{1 + r^{1/2} \cdot 1/2}$$

Where:

r_{11} = Coefficient reliability

$R^{1/2} \cdot 1/2$ = Coefficient between the two test

$$r_{11} = \frac{2 \cdot r^{1/2} \cdot 1/2}{1 + r^{1/2} \cdot 1/2}$$

$$r = \frac{2 \cdot 0,75}{1 + 0,75}$$

$$r = \frac{1,5}{1,75}$$

$$r = 0.85$$

The calculation, it showed that the reliability of the test was 0.85. And it means that the test was reliable, and the reliability of the test is high.

The follow table is the table of reliability criteria:

0.1 – 0.40 = the reliability is low

0.41 – 0.70 = the reliability is significant

0.71 – 0.90 = the reliability is good

0.91 – 1.00 = the reliability is very good

Reliability of the Test Cycle II

$$r_{11} = \frac{2 \cdot r^{1/2} \cdot 1/2}{1 + r^{1/2} \cdot 1/2}$$

$$r = \frac{2 \cdot 0,85}{1 + 0,85}$$

$$r = \frac{1,7}{1,85}$$

$$r = 0,91$$

The calculation, it showed that the reliability of the test was 0, 91. And it means that the test was reliable, and the reliability of the test is very high.

T-test

To find out whether the number head together technique had improve the students' ability in speaking test, the data had been calculated by using T-test formula:

$$T = \frac{Mx - My}{\sqrt{\frac{\sum x^2 + \sum y^2}{(Nx + Ny) - 2\sqrt{\frac{1}{Nx} + \frac{1}{Ny}}}}}$$

M = Total score between I variable (X variable) and II variable (Y variable).

N = Number of cases.

X = The standard deviation from score of X_1 and X_2 .

Y = The standard deviation from score Y_2 of mean Y_1 .

$$T = \frac{Mx - My}{\sqrt{\frac{\sum x^2 + \sum y^2}{(Nx + Ny) - 2\sqrt{\frac{1}{Nx} + \frac{1}{Ny}}}}}$$

$$T = \frac{51,52 - 60,56}{\sqrt{\frac{5,92 + 5,48}{25 + 25 - 2\left(\frac{1}{25} + \frac{1}{25}\right)}}}$$

$$T = \frac{+9,04}{\sqrt{\frac{1052,25}{48} \times \frac{2}{25}}}$$

$$T = \frac{+9,04}{1,75}$$

$$T = 5.16$$

The calculation showed the statistic data of both Cycles I and Cycle II in pre and post-test. The result of calculation showed that the T-test observed is 5.16

T-table

$$t\left(1 - \frac{1}{2}\right) \alpha; N1 + N2 - 2$$

$$t(1.05) 0.05: 25+25-2$$

$$t(1-0.025);48$$

$$t(0.0975;48)$$

$$t=2.00$$

The calculation showed the statistic data of both Cycles I and Cycle II in pre and post-test. The result of calculation showed that the T-table observed is 2. 00

Table of the T-test and T-table

NU	t _{0,995}	t _{0,99}	t _{0,975}	t _{0,95}	t _{0,925}	t _{0,90}	t _{0,75}	t _{0,70}	t _{0,60}	t _{0,55}
1	63,66	31,82	12,71	6,31	3,08	1,376	1,000	0,727	0,325	0,158
2	9,92	6,96	4,30	2,92	1,89	1,061	0,816	0,617	0,289	0,142
3	5,84	4,54	3,18	2,35	1,64	0,978	0,765	0,584	0,277	0,137
4	4,60	3,75	2,78	2,13	1,53	0,941	0,741	0,569	0,271	0,134

5	4,03	3,36	2,57	2,02	1,48	0,920	0,727	0,559	0,267	0,132
6	3,7	3,14	2,45	1,94	1,44	0,906	0,718	0,583	0,265	0,131
7	3,50	3,00	2,36	1,90	1,42	0,896	0,711	0,549	0,263	0,130
8	3,36	2,00	2,31	1,86	1,40	0,889	0,700	0,546	0,262	0,130
9	3,25	2,82	2,26	1,83	1,38	0,88	0,703	0,543	0,261	0,129
10	3,17	2,76	2,23	1,81	1,37	0,879	0,700	0,542	0,280	0,129
11	3,11	2,72	2,20	1,80	1,36	0,876	0,697	0,540	0,200	0,129
12	3,06	2,68	2,18	1,78	1,36	0,873	0,695	0,539	0,259	0,128
13	3,01	2,65	2,16	1,77	1,35	0,870	0,694	0,538	0,259	0,128
14	2,98	2,62	2,14	1,76	1,34	0,868	0,692	0,537	0,258	0,128
15	2,95	2,60	2,13	1,75	1,34	0,866	0,691	0,536	0,258	0,128
16	2,92	2,58	2,12	1,75	1,34	0,865	0,690	0,535	0,258	0,128
17	2,90	2,57	2,11	1,74	1,33	0,863	0,689	0,534	2,57	0,128
18	2,88	2,55	2,10	1,73	1,33	0,862	0,698	0,534	2,57	0,127
19	2,86	2,54	2,09	1,73	1,33	0,861	0,638	0,533	2,57	0,127
20	2,84	2,53	2,09	1,72	1,32	0,860	0,687	0,533	0,257	0,27
21	2,83	2,52	2,08	1,72	1,32	0,859	0,686	0,532	0,257	0,127
22	2,82	2,51	2,07	1,72	1,32	0,858	0,686	0,532	0,256	0,127
23	2,81	2,50	2,07	1,71	1,32	0,858	0,685	0,532	0,256	0,127
24	2,80	2,49	2,08	1,71	1,32	0,857	0,685	0,51	0,256	0,127
25	2,79	2,48	2,06	1,71	1,32	0,856	0,648	0,531	0,256	0,127
26	2,78	2,48	2,06	1,71	1,32	0,856	0,684	0,531	0,256	0,127
27	2,77	2,47	2,05	1,70	1,31	0,856	0,684	0,531	0,256	0,127
28	2,76	2,47	2,05	1,70	1,31	0,855	0,683	0,530	0,256	0,127
29	2,76	2,56	2,04	1,70	1,31	0,854	0,683	0,530	0,256	0,127
30	2,75	2,46	2,04	1,70	1,31	0,854	0,683	0,530	0,256	0,127
40	2,70	2,42	2,02	2,68	1,30	0,851	0,681	0,529	0,255	0,126
60	2,66	2,39	2,00	1,67	1,30	0,848	0,679	0,527	0,254	0,126
120	2,62	2,36	1,98	1,66	1,29	0,845	0,677	0,526	0,254	0,126
00	2,58	2,33	1,06	1,645	1,28	0,842	0,674	0,524	0,253	0,126

**Table 5. Table of the T-test and T-table
(Arikunto 2006:363)**

Sumber: Statiscal table for biliogical, agricultural and medical research, fisher
R.A. dan Yates F. Table 111, oliver&boydltd.Edinburgh.

$T_{0,0995}$ untuktes 2 ekordengan $t_{0,01}$

$t_{0,975}$ untuktesduaekordengant.s $0,05$

Testing Hypothesis

To the test the hypothesis, the data were adapted to the T-test formula chose it should be done to know whether the hypothesis is accepted or rejected, the basis hypothesis is following:

1. If the result of *t-observed* is higher than *t-table* ($t\text{-test} > t\text{-table}$), the null hypothesis (H_0) is rejected and alternative hypothesis (H_a) is accepted. It means that there is a significance difference between variable X and variable Y.
2. If the result of *t-observed* is lower than *t-table* ($t\text{-test} < t\text{-table}$), the null hypothesis (H_0) is accepted and alternative hypothesis (H_a) is rejected. It means that there is no significance difference between variable X and variable Y.

It can be said that H_0 has been rejected and h , has been successfully accepted. The students' mark achievement taught by higher than those taught using no numbered head together technique, so, the improve of numbered head together technique on the students' improve in a conversation of a procedure picture is really accepted in this research.

Research Finding

Based on analyzed the data some finding can be formulated as follow:

1. There is a significant improvement of students' ability in speaking through using series of picture.
2. There is a different level ability of students the ability of cycle 1 is low level and ability cycle 2 is medium level.
3. The mean of cycle 1 51, 52 and mean of cycle 2 is 60, 56
4. The standard deviation (SD) in Cycle I is 5. 92 and in Cycle II is 5. 48
5. The test is valid in which the value the validity of Cycle I is 0. 75 and the Cycle II 0. 85 it is got by using formula of the person product moment.
6. The test is reliable in which the value the reliability in Cycle I is 0. 85 and in Cycle II is 0. 91.
7. The testing hypothesis is accepted which t-test is high than t-table ($5.16 > 2.00$)

Discussion and Interpretation

Discussion

After analyzing the data, the researcher finds out answer of problem of this study is know whether the students grade XI in SMK Swasta Taman Pendidikan on JalanRadjaminPurba, SH Pasar I-A Perdagangan, Kecamatan Bandar – KabupatenSimalungun are able or not to write and increase their ability in a conversation of a procedure text by using series of pictures.

Instrument used for speaking skill through written procedure text. The test converts cycle I and cycle II. Cycle I and Cycle II was the second meeting, the researcher used theory of (Jacobs 1983:40) and (Arikunto 2006) in analysing the data. From the analysing of the data, the researcher found mean cycle I is 51. 52 the validity of the test is 0. 75 (high) the reliability of the test is 0. 85 (very high) and cycle II the reseacher found mean is 60. 56 the validity of the test is 0. 85 (high) and the reliability of test are 0. 91 (very high). The result of the test shows that there is an improvement in speaking through using series of picture in the students grade XI in SMK Swasta Taman Pendidikan on JalanRadjaminPurba, SH Pasar I-A Perdagangan, Kecamatan Bandar – KabupatenSimalungun. After analyzing the data, the researcher has known the use of series of picture in teaching speaking to the students grade XI in SMK Swasta Taman Pendidikan on JalanRadjaminPurba, SH Pasar I-A Perdagangan, Kecamatan Bandar – KabupatenSimalungun

Data Interpretation

This researcher is to know the improvement of using picture in teaching a conversation of a procedure text using series of pictures. To analysis the data in the pre-test, post-test, mean, standard deviation, the score of validity, reliability and the result, the researcher used the scorer to the validity and reliability of the test.

According to Wright (1989: 137) stated that picture could help the students to develop their ideas with their own vocabularies. Pictures are very good to use in teaching language because they can help the students to visualize language from abstract to concert one easily.

During the research in the classroom, the achievement of the students learning English can be anchored and acknowledged the students. It is supported by the data that using procedure pictures in teaching a conversation could give the students visualization about the content of the text. The researcher gave the review of the previous explanation including the difficulties of the students. It was done continuously. The researcher did it to make the students felt common with the material. Hopefully, it could reduce the students' mistakes in producing sentence.

CONCLUTION AND SUGGESTION

Conclusions

In the section, the researcher wants to describe the conclusions that have been found from the problems of study in the chapter 1. The research was conducted in the SMK Swasta Taman Pendidikan on Jalan Radjabin Purba, SH Pasar I-A Perdagangan, Kecamatan Bandar – Kabupaten Simalungun. The conclusions of the research are:

1. Picture series is one of the media that can be used to teach speaking. The implementations of picture series were conducted in several steps. The pictures are stimulating the students according to the lesson. The students are able to present the material by using their own words.
2. The use of picture series can help the students in producing sentences. It is showed by the result of the student speaking conversations. The students have been able to develop the content, organization, and vocabulary properly but they have not been able to use the tenses and the punctuation correctly.

Suggestions

After getting the research result, the researcher wants to give the suggestion to the teachers as the main actor of the class as well as the other researchers, as:

1. For teachers
In teaching learning process, the role of the teacher is much needed. They should be able to control the class and also become an active person in giving motivation to the students to learn the material. The teacher should try to use the power point program to show the media. It can be done to attract the students and make them enjoy with the material. The teacher should give more attention to the language use and mechanic especially in grammar and punctuation.
2. For the other researchers
The researcher wants to give suggestion to other researchers who want to take the same subject to do more detail research about it. Because there will be more possibilities arise when the other researchers dig the theory deeper.

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