# MENGGUNAKAN PETUNJUK KONTEKSTUAL UNTUK MENINGKATKAN PENGUASAAN KOSAKATA SISWA KELAS TUJUH MTS NEGERI 1 PALU

# USING CONTEXTUAL CLUE TO INCREASE VOCABULARY MASTERY OF THE SEVENTH GRADE STUDENTS OF MTS NEGERI 1 PALU

<sup>1</sup>Dwijayani, <sup>2</sup>Nadrun, <sup>3</sup>Budi

<sup>1,2,3</sup>Language and Art Education Department. Teacher Training and Education Faculty Muhammadiyah University of Palu (Email: <u>dwijayaniwiwi96@gmail.com</u>) (Email: <u>nadrununtad@yahoo.com</u>) (Email: budi921@gmail.com)

# **Correspondence Address:**

Name : Dwijayani Faculty : FKIP Muhammadiyah University of Palu Hp :-Email : <u>dwijayaniwiwi96@gmail.com</u>

# ABSTRAK

Para siswa MTs. negeri 1 palu memiliki masalah dalam kosakata penguasaan yaitu; mereka mengalami kesulitan dalam memperkaya kosa kata dan juga menghafalkan perkataan. Penelitian ini bertujuan untuk mengetahui apakah menggunakan teknik petunjuk kontekstual efektif untuk meningkatkan penguasaan Kosakata siswa kelas tujuh dari MTs. negeri 1 palu. Ini adalah desain penelitian kuasi eksperimental. Sampel adalah 28 untuk Grade VII B dan 26 untuk Grade VII C dipilih secara sengaja. Datanya dikumpulkan melalui tes (pre-Test dan post-test). Pra-tes dilakukan untuk mengetahui pengetahuan siswa sebelumnya sebelum pengobatan, sementara pasca-tes dilakukan untuk mengukur pemahaman mereka setelah pengobatan. Data ini dianalisis secara statistik. Hasil penelitian ini menunjukkan t-dihitung adalah 3,171 dan t-meja adalah 2,013 dengan menerapkan 0,05 tingkat signifikansi dan 52 derajat kebebasan. Nilai t-dihitung lebih tinggi dari nilai t-Table. Ini berarti hipotesis penelitian diterima. Dengan kata lain, menggunakan petunjuk kontekstual secara efektif dapat meningkatkan siswa dari Kosakata penguasaan.

Kata kunci: menggunakan. Teknik petunjuk kontekstual. Kosakata penguasaan.

## ABSTRACT

The students of MTs. Negeri 1 Palu had the problem in vocabulary mastery namely; they had difficulties in enriching vocabulary and also memorizing words as well. This research aims to find out whether using Contextual clue technique is effective to increase the student's vocabulary mastery of the seventh-grade students of MTs. Negeri 1 Palu. This is a quasi-experimental research design. Its sample was 28 for grade VII B and 26 for grade VII C selected purposively. Its data was collected through test (Pre-test and Post-test). The pretest was conducted to find out the students' prior knowledge before the treatment, while the post-test was conducted to measure their understanding after the treatment. These data were analyzed statistically. The result of this research indicates the t-counted was 3.171 and the ttable was 2.013 by applying 0.05 level of significance and 52 degree of freedom. The tcounted value was higher than the t-table value. It means the research hypothesis is accepted. In other words, using contextual clue can effectively increase students of vocabulary mastery.

Key terms: Using. Contextual Clue technique. Vocabulary mastery.

### **INTRODUCTION**

In learning English, there are four components that must be learned. They are pronunciation, grammar, structure, and vocabulary. One component in English is vocabulary that also has its own passion for students to learn more English. Vocabulary is one of the most important language components for students to learn. In the field of education, by mastering vocabulary the students are able to listen, read, write and speak well.

As stated in the 2013 Curriculum of Junior high school *(SMP)* level, there are four components that should be achieved in the teaching-learning process; there are pronunciation, grammar, structure, and vocabulary. In the teaching process, the students must know many vocabularies so that they can easily master English. It is stated that the students are intended to understand how to express their ideas and feelings both oral and written forms.

In fact, the students still get difficulties to master vocabulary. Based on the researcher's preliminary observation at MTs. Negeri 1Palu, there are some problems faced by the students. First, the students had difficulties in enriching vocabulary and also memorizing words. If they did not know how to expand their vocabulary, they would gradually lose interest in learning. Second, they found difficulties in remembering words

that have been learned. Third, the teacher still used conventional technique, so the students are bored and unmotivated to learn.

Based on problems faced by the seventh grade of MTs. Negeri 1 Palu above, the researcher proposed a technique that can be used to increase students' vocabulary. The proposed technique is a contextual clue. According to Nation (1990), context clue is a technique of inferring the meaning of unfamiliar words based on the context. It can be done by combining our knowledge of English or simply look at the relationship between unfamiliar words with the other word, clauses sentences, or paragraphs. This is what we call guessing meaning from context.

Based on the explanation above, the researcher is interested in conducting research on "Using Contextual Clue to Increase Vocabulary Mastery of the Seventh Grade Students of MTs. Negeri 1 Palu".

#### **RESEARCH METHODS**

In the research, the researcher applied quasi-experimental research design nonequivalent with one experimental group and control group, in which vocabulary can be increased by using contextual clue in the teaching and learning process. The researcher treated one group only, an experimental group, while the control group was not given the treatment.

This research was the eighth-grade students of MTs.Negeri 1 Palu. It consisted of eight classes. VII A and VII B are 28 students, VII C is 26 students, VII D is 30 students, VII E is 33 students, VIII F is 32 students, and VII G is of 28 students. The total population of the seventh-grade students of MTs.Negeri 1 Palu was 210 students. The researcher used a purposive sampling technique to do this research. The class was chosen namely VII B as a control class and VII C as an experimental class.

The research has two variables; they are the dependent and independent variable. The independent variable is the major variable that is investigated, select, manipulate, and measure while the dependent variable is one the observe, measure, and determine as the effect of the independent variable. Based on the title of the research, there are two variables in which the dependent variable is the vocabulary mastery of the seventh-grade students of MTs Negeri 1 Palu while the independent variable is the application of contextual clue technique.

### FINDINGS

#### **Result of the Test**

The researcher gave a test as the main instrument of this research. The test was divided into pre-test and post-test. The pre-test aims to find out the students' prior achievement in vocabulary. While the post-test aims to find out whether the application of contextual clue in the treatment effectively increase students'vocabulary mastery or not. The researcher was focused in three part of speech namely noun, verb, and adjective.

### **Result of pre-test**

Table 4.1 Attachments, the purpose of the pre-test is to find out the ability of the students in vocabulary before the treatment by using contextual clue technique. The pre-test was done before the treatment in VII B and VII C. While VII B as the control group and VII C as the experimental one. Class VII B and VII C was conducted on August 8<sup>th</sup>, 2018.

Table 4.2 Attachments, after presenting the pretest's result of experimental group, the research shows that the highest score of this class was 50 and the lowest score was 25. Then she computed the students mean score by using the following formula:

$$M = \frac{\sum x}{N} = \frac{1010}{26} = \frac{2}{38.85}$$

After presenting the pretest's result of experimental class, the research shows that the highest score of this class was 85 and the lowest score was 35. Then she computed the students mean score by using the following formula:

$$M = \frac{\sum y}{N} = \frac{1520}{28} = 354.28$$

# **Result of The Post-Test**

Table 4.3 Attachments, with the research result of post-test in the experimental group, the students' score was better than pretest. The researcher computed the mean score of students' post-test by applying the formula used in the pre-test. To count the post-test student's individual score, the researcher used the formula as follows:

$$M = \frac{\sum x}{N} = \frac{1925}{26} = i 74.03$$

Table 4.4 Attachments, the result of control group post-test was shown that the student's score was better than pretest. The highest score was 80 while the lowest was 35. The formula used as follows:

$$M = \frac{\sum x}{N} = \frac{1710}{28} = \frac{1}{6} 61.07$$

Table 4.5, table 4.6 Attachments, after counting all students' scores of experimental and control groups, the researcher calculated the mean score of pre-test and post-test. The researcher computed the deviation score by computing the students' individual scores in the pre-test and post-test of experimental group. The result of deviation value and significant score are presented in the following table as follows:

Then, the researcher calculated the mean deviation score by using formula as follows:

$$Mx = \frac{\sum x}{N} = \frac{915}{26} = i35.19$$
$$My = \frac{\sum y}{N} = \frac{160}{28} = i5.71$$

The mean deviation of the experimental group is 35.19 while the control one is 5.71. Then, the researcher calculated the mean square deviation experimental and control groups by using formula as follows:

<b>Experimental Group</b>	: Control Group:
$\sum x^2 = \sum x^2 - i i i $	$\sum y^2 = \sum y^2 - i i i$
$= 33675 - (\frac{915}{26})^2$	$=11900 - (\frac{160}{28})^2$
$=33675 - (35.19)^2$	$=11900-(5.71)^{2}$
=33675-1238.34	=11900-32.6041
=32436.66	= 11867.39

The mean square deviation score of the experimental group 32436.66 is greater than the mean square deviation score of the control group is 11867.39. The degree of freedom 26 + 28 - 2 = 52. The t-table with the level of significance is 0.05. In other words, to find out the significance between experimental and control groups, the researcher analyzes the data by using t-test formula as follows:

$$t = \frac{Mx - My}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{N_{x+N_y} - 2}\right) \left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

$$t = \frac{30.19 - 5.71}{\sqrt{\left(\frac{32436.66 + 11867.39}{26 + 28 - 2}\right) \left(\frac{1}{26} + \frac{1}{28}\right)}}$$

$$t = \frac{24.48}{\sqrt{\left(\frac{44304.05}{52}\right) \left(\frac{1}{26} + \frac{1}{28}\right)}}$$

$$t = \frac{24.48}{\sqrt{\left(\frac{44304.05}{52}\right) \left(\frac{54}{728}\right)}}$$

$$t = \frac{24.48}{\sqrt{(852.001)(0.07)}}$$

$$t = \frac{24.48}{\sqrt{59.64}}$$

$$t = \frac{24.48}{\sqrt{59.64}}$$

t = 3.171

To determine t-table value of 52 degree of freedom, the researcher applied interpolation formula because 52 degree of freedom is not found in the t-counted value. The calculation is as follows:

Degree of freedom = Nx + Ny - 2

$$27 + 27 - 2 = 52$$

Level of significance is 0.05

- a. 60 52 = 8
- b. 60 40 = 20
- c. 2.021 2.000=0.021
- d.  $\frac{a}{b} x c = \frac{8}{20} x 0.021 = 0.008$

If degree of freedom 52 of 2.021 - 0.008 = 2.013. In the t-table value of 52 degree of freedom is 2.013

Since t-counted is greater 3.171 than t-table value is 2.013, Ha is accepted.

Then, the researcher looked for the

degree of freedom (df) and the level of significance to consult the result of the t-test. If the tcounted 3.171 is higher than t-table 2.013 the alternative hypothesis is accepted. In other words, contextual clue technique is effective to increase students' vocabulary mastery of seventh grade of MTs Negeri 1 Palu.

### DISCUSSION

The object of this research was VII grade students of MTs Negeri 1 Palu. The researcher gave the treatment to the VII C grade students by using contextual clue technique. This technique can increase the students' vocabulary mastery. It can be seen from the results of the tests that have been given to students. This technique can increase an opportunity for students to explore their knowledge especially that vocabulary mastery.

The researcher gave the pretest to both groups: VII B and VII C grade before the treatment. The pretest was given on August 8<sup>th</sup>, 2018. In the pre-test, she gave a test namely multiple choice and translation words. The total of the test was 20. Then, the students answer by their knowledge. The mean score of the experimental group in pretest was 49.70 and 55.15 for the control group.

The researcher provided fun activities for the students to support the teaching and learning process. It aims to enable the students to easily understand and remember a lot of vocabulary until the end of learning. In the first meeting, she gave some vocabulary by using contextual clue. She asked one of the students to practice in front of the class and the others will guess. In the second meeting, she gave some vocabulary by using experience. She guided the students to remain their experience before. In the third and fourth meetings, she gave vocabulary by using contextual clue. She gave some examples of definition and the students guess the word that matched the definition. The fifth and six meetings, she gave vocabulary by using contextual clue. She gave some vocabulary that has antonym or synonym.

The researcher got some progress during the process of teaching and learning. First, the students get a lot of vocabulary. Second, the students are more interested in English learning and the last, they are more confident in expressing their ideas or opinions.

The researcher did the posttest to VII B and VII C. The post-test was given on September, 26<sup>th</sup> 2018 for the experimental group and control one. From the post-test result, it was proven that the mastery vocabulary showed an increase even though some students had a low score.

After conducting the treatment, the researcher gave post-test both the experimental group and control one. She found the significant mean score of the experimental group was 74.03 and the control one is 61.07. It shows that the post-test results of the experimental group are higher than the result of the control one. It means there is an improvement of the student's results in the experimental group. It causes by contextual clue.

## **CONCLUSIONS AND SUGGESTIONS**

It is concluded that the students' vocabulary mastery can be increased by using of contextual clue technique. The researcher gave the test (pretest and posttest) and treatment. The result of the test is that the t-counted (3.171) is higher than the t-table (1.999), it indicates that the research hypothesis is accepted. It is proved that the use of contextual clue technique is effective in increasing vocabulary mastery. Hopefully, this research may be useful for all those who read this. First, English teacher can use this technique as a reference material to increase English learning. Second, students can be motivated in learning English. Last, readers can use this as reference to reading the material and other research.

#### REFERENCES

Arikunto, S. (2006). Prosedur Penelitian. Jakarta: Rineka Cipta.

Asy'ari, M. (2006). Penerapan Pendekatan STM. Jakarta: Depdiknas.

- Brown, D. F. (1980). *Eight Cs and G Guidelines of Vocabulary Teaching*. Guidelines for Vocabulary Teaching.RELC Journal Supplement. Singapore: RELC.
- Cameron, L. (2001). *Teaching Language to Young Learners*. Cambridge: Cambridge University Press.

- Departemen Pendidikan Nasional, (2007). Kurikulum Satuan Tingkat Pendidikan Mata Pelajaran Bahasa Inggris: Sekolah Menengah Pertama (SMP)Madrasah Tsanawiah (MTs). Jakarta: Departemen Pendidikan Nasional.
- McCharty, M.J. (1990). Vocabulary. Oxford: University Press.
- Murcia. M. C. (2007). *Teaching Vocabulary Through Contextual Clues*. Faculty Tarbiyah and Teacher's Training State Islamic University Syarif Hidayatullah Jakarta.
- Napa, A. P. (1991). Vocabulary Development Skill. Yogyakarta: Kanisius.
- Schmitt, N. (2000). Vocabulary in Language Teaching. USA: Cambridge University Press.
- Stuart. (2005). Receptive and Productive Vocabulary Learning : The Effects of Reading and Writing on Word Knowledge, Studies in Second Language Acquisition / Volume 27 / Issue 01 / March, pp. 33 – 52 (retrieved from internet, 22<sup>nd</sup> of November, 2017).
- Sugiono. (2010). Metode Penelitian Kuantitatif dan Kualitatif R&D. Bandung: Alfabeta.

# ATTACHMENT

No.InitialScoresCategoryQualification1AHRS85Very GoodSuccessful2ABDK75GoodSuccessful3PTRI85Very GoodSuccessful4SLIH70FairFair5DWNFS80GoodSuccessful6ISHR60PoorFailed7NDYSL80GoodSuccessful8SSKR50Very PoorFailed9ABDH60PoorFailed10ANTE70FairFair11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80GoodSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80Good		Pre-test Score of the Experimental Class (N=33)						
2ABDK75GoodSuccessful3PTRI85Very GoodSuccessful4SLIH70FairFair5DWNFS80GoodSuccessful6ISHR60PoorFailed7NDYSL80GoodSuccessful8SSKR50Very PoorFailed9ABDH60PoorFailed10ANTE70FairFair11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful	No.	Initial	Scores	Category	Qualification			
3PTRI85Very GoodSuccessful4SLIH70FairFairFair5DWNFS80GoodSuccessful6ISHR60PoorFailed7NDYSL80GoodSuccessful8SSKR50Very PoorFailed9ABDH60PoorFailed10ANTE70FairFair11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful31MASDR35Very good <td>1</td> <td>AHRS</td> <td>85</td> <td>Very Good</td> <td>Successful</td>	1	AHRS	85	Very Good	Successful			
4SLIH70FairFairFair5DWNFS80GoodSuccessful6ISHR60PoorFailed7NDYSL80GoodSuccessful8SSKR50Very PoorFailed9ABDH60PoorFailed10ANTE70FairFair11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very good<	2	ABDK	75	Good	Successful			
5DWNFS80GoodSuccessful6ISHR60PoorFailed7NDYSL80GoodSuccessful8SSKR50Very PoorFailed9ABDH60PoorFailed10ANTE70FairFair11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very goodSuccessful33KRIN85Very good </td <td>3</td> <td>PTRI</td> <td>85</td> <td>Very Good</td> <td>Successful</td>	3	PTRI	85	Very Good	Successful			
6ISHR60PoorFailed7NDYSL80GoodSuccessful8SSKR50Very PoorFailed9ABDH60PoorFailed10ANTE70FairFair11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very goodSuccessful33KRIN85Very goodSuccessful33KRIN85Very g		SLIH	70	Fair	Fair			
7NDYSL80GoodSuccessful8SSKR50Very PoorFailed9ABDH60PoorFailed10ANTE70FairFair11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	5	DWNFS	80	Good	Successful			
8SSKR50Very PoorFailed9ABDH60PoorFailed10ANTE70FairFair11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very goodSuccessful33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	6	ISHR	60	Poor	Failed			
9ABDH60PoorFailed10ANTE70FairFair11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	7	NDYSL	80	Good	Successful			
10ANTE70FairFair11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful	8	SSKR	50	Very Poor	Failed			
11MFTHD45Very PoorFailed12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful31MASDR35Very goodSuccessful32STASYH65PoorFailed33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	9	ABDH	60	Poor	Failed			
12ANSAFA75GoodSuccessful13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	10	ANTE	70	Fair	Fair			
13NRLA50Very PoorFailed14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	11	MFTHD	45	Very Poor	Failed			
14AIDAI60PoorFailed15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful19AKNA60PoorFailed20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	12	ANSAFA	75	Good	Successful			
15MARZ60PoorFailed16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful19AKNA60PoorFailed20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	13	NRLA	50	Very Poor	Failed			
16MFWN90Very GoodSuccessful17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful19AKNA60PoorFailed20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very goodSuccessful33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	14	AIDAI	60	Poor	Failed			
17RIAN75GoodSuccessful18ISDWMA80GoodSuccessful19AKNA60PoorFailed20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	15	MARZ	60	Poor	Failed			
18ISDWMA80GoodSuccessful19AKNA60PoorFailed20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful	16	MFWN	90	Very Good	Successful			
19AKNA60PoorFailed20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful	17	RIAN	75	Good	Successful			
20SYRMD55PoorFailed21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful33KRIN85Very goodSuccessful	18	ISDWMA	80	Good	Successful			
21ARDYND75GoodSuccessful22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful	19	AKNA	60	Poor	Failed			
22INYHTF70FairFair23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful	20	SYRMD	55	Poor	Failed			
23MHAID80ExcellentSuccessful24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful	21	ARDYND	75	Good	Successful			
24ANDGZN70FairFair25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful	22	INYHTF	70	Fair	Fair			
25STSYBN80GoodSuccessful26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful	23	MHAID	80	Excellent	Successful			
26DMSPST85Very goodSuccessful27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful	24	ANDGZN	70	Fair	Fair			
27RMDKR80GoodSuccessful28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessful	25	STSYBN	80	Good	Successful			
28ANRFD55PoorFailed29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessfulTotal	26	DMSPST	85	Very good	Successful			
29ALISVL75GoodSuccessful30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessfulTotal2305	27	RMDKR	80	Good	Successful			
30DRLDWP85Very goodSuccessful31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessfulTotal2305	28	ANRFD	55	Poor	Failed			
31MASDR35Very PoorFailed32STASYH65PoorFailed33KRIN85Very goodSuccessfulTotal2305	29	ALISVL	75	Good	Successful			
32STASYH65PoorFailed33KRIN85Very goodSuccessfulTotal2305	30	DRLDWP	85	Very good	Successful			
33KRIN85Very goodSuccessfulTotal2305	31	MASDR	35	Very Poor	Failed			
Total 2305	32	STASYH	65	Poor	Failed			
Total 2305	33	KRIN	85	Very good	Successful			
Average 69.84 Poor Failed		Total	2305					
		Average	69.84	Poor	Failed			

Table 4.1 re-test Score of the Experimental Class (N=33)

Table 4.2The Pre-test Score of the Control Group (N=28)

	The Fre-test Score of the Control Group (N-28)					
No.	Initials	Scores	Category	Qualification		
1	RW	80	Good	Failed		
2	AA	60	Poor	Failed		
3	AY	50	Poor	Failed		
4	RR	35	Very Poor	Failed		
5	ZA	75	Good	Successful		
6	IN	40	Very poor	Failed		

	Average	54.28	Poor	Failed
	Total	1520		
28	JD	50	Poor	Failed
27	MS	35	Very Poor	Failed
26	MD	40	Very Poor	Failed
25	AL	35	Very Poor	Failed
24	TL	45	Very Poor	Failed
23	MI	75	Good	Successful
22	NLY	70	Fair	Fair
21	GKR	60	Poor	Failed
20	TT	40	Very Poor	Failed
19	ZFR	55	Poor	Failed
18	INH	50	Poor	Failed
17	MKR	40	Very Poor	Failed
16	EA	35	Very Poor	Failed
15	ZK	60	Poor	Failed
14	SL	45	Very Poor	Failed
13	MM	75	Good	Successful
12	AB	45	Very Poor	Failed
11	UN	60	Poor	Failed
10	MQ	70	Fair	Fair
9	DN	80	Good	Successful
8	MSL	85	Very Good	Successful
7	ZN	60	Poor	Fair

 Table 4.3

 Post-test Score of the Experimental Group (N=26)

	<b>Post-test Score of the Experimental Group (N=26)</b>					
No.	Initials	Scores	Category	Qualification		
1	AR	70	Fair	Fair		
2	AK	65	Poor	Failed		
3	PI	75	Good	Successful		
4	SL	75	Good	Successful		
5	DS	70	Fair	Fair		
6	SH	80	Good	Successful		
7	NSL	80	Good	Successful		
8	SS	75	Good	Successful		
9	AH	75	Good	Successful		
10	ANE	70	Fair	Fair		
11	MD	65	Fair	Fair		
12	ANA	75	Good	Successful		
13	NA	80	Good	Successful		
14	AII	75	Good	Successful		
15	MAR	70	Fair	Fair		
16	MFN	75	Good	Successful		
17	RN	80	Good	Successful		
18	ISA	75	Good	Successful		
19	AA	70	Fair	Fair		
20	SYD	75	Good	Successful		
21	ARD	80	Good	Successful		

	Average	74.03	Fair	Fair
	Total	1925		
26	DT	70	Fair	Fair
25	TN	75	Good	Successful
24	AN	80	Good	Successful
23	MD	75	Good	Successful
22	IF	70	Fair	Fair

Table 4.4Post-test Score of the Control Group (N=28)

No.	Initials	Scores	Category	Qualification
1	RW	70	Fair	Fair
2	AA	50	Poor	Failed
2 3	AY	65	Fair	Fair
4	RR	50	Poor	Failed
5	ZA	55	Poor	Failed
6	IN	40	Very Poor	Failed
7	ZN	70	Fair	Fair
8	MSL	55	Poor	Failed
9	DN	60	Poor	Failed
10	MQ	40	Very Poor	Failed
11	UN	65	Fair	Fair
12	AB	70	Fair	Fair
13	MM	75	Good	Successful
14	SL	80	Good	Successful
15	ZK	60	Poor	Failed
16	EA	70	Fair	Fair
17	MKR	55	Poor	Failed
18	INH	80	Good	Successful
19	ZFR	70	Fair	Fair
20	TT	35	Very Poor	Failed
21	GKR	50	Poor	Failed
22	NLY	40	Very Poor	Failed
23	MI	80	Good	Successful
24	TL	60	Poor	Failed
25	AL	75	Good	Successful
26	MD	70	Fair	Fair
27	MS	50	Poor	Failed
28	JD	70	Fair	Fair
	Total	1710		
	Average	61.07	Poor	Failed

Tabl	e 4.5
------	-------

Students' Score Deviation of the Experimental Group (N=26)						
No. Initials		<b>Student's Scores</b>		Deviation	<b>Square Deviation</b>	
No.	Initials	Pre-test	Post-test	$X^{2} - X^{1}$	<b>X</b> <sup>2</sup>	
1.	AR	40	70	30	900	
2.	AK	30	65	35	1225	

	Total	1010	1925	915	33675
26.	DT	45	70	25	625
25.	TN	35	75	40	1600
24.	AN	30	80	50	2500
23.	MD	35	75	40	1600
22.	IF	40	70	30	900
21.	ARD	45	80	35	1225
20.	SYD	45	75	30	900
19.	AA	40	70	30	900
18.	ISA	50	75	25	625
17.	RN	30	80	50	2500
16.	MFN	25	75	50	2500
15.	MAR	35	70	35	1225
14.	AII	45	75	30	900
13.	NA	40	80	40	1600
12.	ANA	35	75	40	1600
11.	MD	30	65	35	1225
10.	ANE	40	70	30	900
9.	AH	45	75	30	900
8.	SS	50	75	25	625
7.	NSL	35	80	45	2025
6.	SH	40	80	40	1600
5.	DS	35	70	35	1225
4.	SL	40	75	35	1225
3.	PI	50	75	25	625

 Table 4.6

 Students' Score Deviation of the Control Group (N=28)

	Students' Score Deviation of the Control Group (N=28)					
No	Initiala	Student	's Scores	Deviation	<b>Square Deviation</b>	
No.	Initials	Pre-test	Post-test	$\mathbf{Y}^2 - \mathbf{Y}^1$	$\mathbf{Y}^2$	
1.	RW	50	70	20	400	
2.	AA	60	50	-10	100	
3.	AY	50	65	-15	225	
4.	RR	35	50	15	225	
5.	ZA	75	55	-5	25	
6.	IN	40	40	0	0	
7.	ZN	60	70	-5	25	
8.	MSL	85	55	-30	900	
9.	DN	80	60	-15	225	
10.	MQ	70	40	-30	900	
11.	UN	60	65	5	25	
12.	AB	45	70	25	625	
13.	MM	75	75	-5	25	
14.	SL	45	80	35	1225	
15.	ZK	60	60	0	0	
16.	EA	35	70	35	1225	
17.	MKR	40	55	15	225	
18.	INH	50	80	30	900	
19.	ZFR	55	70	15	225	
20.	TT	40	35	-5	25	

21.	GKR	60	50	-10	100
22.	NLY	70	40	-30	900
23.	MI	75	80	5	25
24.	TL	45	60	15	225
25.	AL	35	75	40	1600
26.	MD	40	70	30	900
27.	MS	35	50	15	225
28.	JD	50	70	20	400
	Total	1520	1710	160	11900