**CHAPTER IV**

**FINDING AND DISCUSSION**

1. **The Data**

**A.1 Description of Data**

The data were obtained from the result of the listening comprehension test in pre test and post test. There were 53 students from two classes. Both Experimental and control group were given multiple choice in pre test in order to know the students’ prior score in listening comprehension narrative text. The test was calculated based on the indicators in rubrics assessment. From the result of the pre test, it was known that students’ listening comprehension ability was low.

After the pre test had been carried out, the treatment was given to the control group. The control group was taught using audio and the experimental group was taught audio - visual. The result of pre test and post test both groups.

**Table 2.1**

**The Students’ Score of Control Group**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Students’ Initial Name** | **Pre Test** | | **Post Test** | |
| **(y1)** | **(y1)2** | **(y2)** | **(y2)2** |
| 1. | ARM | 50 | 2500 | 95 | 9025 |
| 2. | AH | 55 | 3025 | 65 | 4225 |
| 3. | BD | 40 | 1600 | 70 | 4900 |
| 4. | BA | 45 | 2025 | 70 | 4900 |
| 5. | CN | 50 | 2500 | 70 | 4900 |
| 6. | DW | 60 | 3600 | 75 | 5625 |
| 7. | DEW | **30** | 900 | 75 | 5625 |
| 8. | EM | 60 | 3600 | 70 | 4900 |
| 9. | FS | 55 | 3025 | 80 | 6400 |
| 10. | IY | 45 | 2025 | 95 | 9025 |
| 11. | JF | 40 | 1600 | 90 | 8100 |
| 12. | KU | 45 | 2025 | 90 | 8100 |
| 13. | LM | 30 | 900 | 80 | 6400 |
| 14. | MAK | 40 | 1600 | 85 | 7225 |
| 15. | MF | 50 | 2500 | 80 | 6400 |
| 16. | MRD | 50 | 2500 | 75 | 5625 |
| 17. | MY | 55 | 3025 | 80 | 6400 |
| 18. | MYS | 40 | 1600 | 85 | 7225 |
| 19. | NS | 40 | 1600 | 75 | 5625 |
| 20. | NH | 45 | 2025 | 70 | 4900 |
| 21. | NK | 35 | 1225 | 75 | 5625 |
| 22. | NR | 60 | 3600 | 85 | 7225 |
| 23. | PA | 60 | 3600 | 70 | 4900 |
| 24. | SSM | 50 | 2500 | 65 | 4225 |
| 25. | SS | 50 | 2500 | 65 | 4225 |
| 26. | SP | 45 | 2025 | 65 | 4225 |
| 27. | ZW | 30 | 900 | **95** | 9025 |
| **Total** | | **1255** | **60525** | **2095** | **164975** |
| **Mean** | | **46,48** |  | **77,59** |  |

From the table 2.1 above, it can be seen the control group the total score of pre test is 1255, the lowest score of pre test is 30 and the highest is 60. After fiving treatments, the students have higher score with the total score of post test is 2095, the lowest score for the post test is 65 and the highest is 95.

**Table 2.2**

**The Students’ Score of Experimental Group**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Name** | **Pre Test** | | **Post Test** | | |
| **(x1)** | **(x1)2** | | **(x2)** | **(x2)2** |
| 1. | AHT | 45 | 2025 | | 80 | 6400 |
| 2. | AHAR | 45 | 2025 | | 65 | 4225 |
| 3. | ARS | 50 | 2500 | | 70 | 4900 |
| 4. | CP | 50 | 2500 | | 70 | 4900 |
| 5. | DM | 45 | 2025 | | 75 | 5625 |
| 6. | DPA | 60 | 3600 | | 80 | 6400 |
| 7. | FF | 65 | 4225 | | 85 | 7225 |
| 8. | HA | 55 | 3025 | | 80 | 6400 |
| 9. | IFN | **30** | 900 | | 90 | 8100 |
| 10. | IA | 30 | 900 | | 75 | 5625 |
| 11. | LAS | 35 | 1225 | | 90 | 8100 |
| 12. | MA | 40 | 1600 | | 80 | 6400 |
| 13. | MI | 45 | 2025 | | 85 | 7225 |
| 15. | MRH | 55 | 3025 | | 90 | 8100 |
| 14. | MS | 50 | 2500 | | 90 | 8100 |
| 16. | NA | 50 | 2500 | | 85 | 7225 |
| 17. | NRN | 45 | 2025 | | 75 | 5625 |
| 18. | OIM | 35 | 1225 | | 65 | 4225 |
| 19. | PSR | 40 | 1600 | | 90 | 8100 |
| 20. | RS | 60 | 3600 | | 90 | 8100 |
| 21. | RAH | 60 | 3600 | | **95** | 9025 |
| 23. | SS | 40 | 1600 | | 95 | 9025 |
| 24. | SDC | 65 | 4225 | | 95 | 9025 |
| 22. | SE | 65 | 4225 | | 95 | 9025 |
| 25. | TAP | 65 | 4225 | | 95 | 9025 |
| 26. | YAM | 40 | 1600 | | 80 | 6400 |
| **Total**  **Mean** | | **1265** | **64525** | | **2150** | **180350** |
| **48,65** |  | | **82,69** |  |

From the table 2.2 above, it can be seen the Experimental group the total score of pre test is 1265, the lowest score of pre test is 30 and the highest is 65. After fiving treatments, the students have higher score with the total score of post test is 2150, the lowest score for the post test is 65 and the highest is 95.

From the data, there was a significant difference between the students’ score. It can be seen that the student who were taught by audio - visual got higher score than were taught using audio.

**B. Data Analysis**

**B.1 The Validity**

The writer counts the validity of the rest questions by using Audio – Visual. The result can be seen in the following table:

**Table 2.3**

**The Validity of Question**

**Post Test Experimental Class**

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | 0.5799781 | 0,316 | VALID |
| 2 | 0.6647552 | 0,316 | VALID |
| 3 | 0.6856745 | 0,316 | VALID |
| 4 | 0.7560128 | 0,316 | VALID |
| 5 | 0.8501242 | 0,316 | VALID |
| 6 | 0.8755718 | 0,316 | VALID |
| 7 | 0.7918829 | 0,316 | VALID |
| 8 | 0.8134841 | 0,316 | VALID |
| 9 | 0.7422207 | 0,316 | VALID |
| 10 | 0.7703411 | 0,316 | VALID |
| 11 | 0.8793638 | 0,316 | VALID |
| 12 | 0.8086355 | 0,316 | VALID |
| 13 | 0.7585942 | 0,316 | VALID |
| 14 | 0.9046794 | 0,316 | VALID |
| 15 | 0.7943051 | 0,316 | VALID |
| 16 | 0.8647304 | 0,316 | VALID |
| 17 | 0.8501242 | 0,316 | VALID |
| 18 | 0.8647304 | 0,316 | VALID |
| 19 | 0.6858551 | 0,316 | VALID |
| 20 | 0.6927203 | 0,316 | VALID |

**B.2. Calculation of the Average Value and Standard Deviation**

1. **Calculation of Pre-test Data Control Class**

From tabulating the values obtained:



 n = 27



So the average is:



And the standard deviation is:





=

=



= 9,17

*S2* = 84,0

1. **Calculation of Post-test Data Control Class**

From tabulating the values obtained:



  n = 27



So the average is:



And the standard deviation is:





=

=



= 9,64

*S2* = 92,9

1. **Calculation of Pre-test Data Experimental Class**

From tabulating the values obtained:



  n = 26



So the average is:



And the standard deviation is:





=

=



= 10,9

*S2* = 118,8

1. **Calculation of Post-test Data Experimental Class**

From tabulating the values obtained:



  n = 26



So the average is:



And the standard deviation is:





=

=



= 10,1

*S2* = 102,0

**B.3 Analysis Requirement Test**

**B.3.1 The Calculation of Normality Test**

1. **Normality Test of Experimental Class**
2. **Normality test of Pre-test**

Find Z score by using by using the formula:

Zi=

1. Zi = = -1,7110
2. Zi = = -1,2523
3. Zi = = -0,7936
4. Zi = = -0,3349
5. Zi = = -0,1239

Find out S(Zi) we use the formula : S(Zi) =

1. S(Zi) = = 0,0769
2. S(Zi) = = 0,1538
3. S(Zi) = = 0,3077
4. S(Zi) = = 0,5000
5. S(Zi) = = 0,6538

**TABLE 3.1**

**Normality Test of Pre-test at Experimental Group**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Score** | **F** | **Fcum** | **(Zi)** | **F(Zi)** | **S(Zi)** | **[F(Zi)–S (Zi)]** |
| 1 | 30 | 2 | 2 | -1.7110 | 0.0435 | 0.0769 | 0.0334 |
| 2 | 35 | 2 | 4 | -1.2523 | 0.1052 | 0.1538 | 0.0486 |
| 3 | 40 | 4 | 8 | -0.7936 | 0.2137 | 0.3077 | 0.0940 |
| 4 | 45 | 5 | 13 | -0.3349 | 0.3689 | 0.5000 | **0.1311** |
| 5 | 50 | 4 | 17 | 0.1239 | 0.5493 | 0.6538 | 0.1046 |
| 6 | 55 | 2 | 19 | 0.5826 | 0.7199 | 0.7308 | 0.0109 |
| 7 | 60 | 3 | 22 | 1.0413 | 0.8511 | 0.8462 | 0.0050 |
| 8 | 65 | 4 | 26 | 1.5000 | 0.9332 | 1.0000 | 0.0668 |

From the table above, it can be seen that the Liliefors Observation or L0 = 0,1311 with n = 26 and at real level = 0, 05 from the list critical value of Liliefors table, Lt = 0,176. It can be concluded that the data distribution was normal, because L0 (0,1311)< Lt (0,176).

1. **Normality test of Post-test**

Find Z score by using by using the formula:

Zi=

1. Zi =  = 1,7784
2. Zi =  = 1,2887
3. Zi =  = 0,7980
4. Zi =  = 0,3078
5. Zi =  = 0,1824

Find out S(Zi) we use the formula : S(Zi) =

1. S(Zi) = = 0,1112
2. S(Zi) = = 0,1852
3. S(Zi) = = 0,2963
4. S(Zi) = = 0,4444
5. S(Zi) = = 0,5556

**TABLE 3.2**

**Normality Test of Post-test at Experimental Class**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Score** | **F** | **Fcum** | **(Zi)** | **F(Zi)** | **S(Zi)** | **[F(Zi)–S(Zi)]** |
| 1 | 65 | 3 | 3 | -1.7784 | 0.0377 | 0.1111 | 0.0734 |
| 2 | 70 | 2 | 5 | -1.2882 | 0.0988 | 0.1852 | 0.0864 |
| 3 | 75 | 3 | 8 | -0.7980 | 0.2124 | 0.2963 | 0.0839 |
| 4 | 80 | 4 | 12 | -0.3078 | 0.3791 | 0.4444 | 0.0653 |
| 5 | 85 | 3 | 15 | 0.1824 | 0.5723 | 0.5556 | 0.0168 |
| 6 | 90 | 6 | 21 | 0.6725 | 0.7494 | 0.7778 | 0.0284 |
| 7 | 95 | 6 | 27 | 1.1627 | 0.8775 | 1.0000 | **0.1225** |

From the table above, it can be seen that the Liliefors Observation or L0 = 0,1225 with n = 27 and at real level = 0, 05 from the list critical value of Liliefors table, Lt = 0,176. It can be concluded that the data distribution was normal, because L0 (0,1225)< Lt (0,176).

1. **Normality Test of Control Class**
2. **Normality test of Pre-test**

Find Z score by using by using the formula:

Zi=

1. Zi = = 1,7972
2. Zi = = 1,2519
3. Zi = = 0,7067
4. Zi = = 0,1614
5. Zi = = 0,3839

Find out S(Zi) we use the formula : S(Zi) =

1. S(Zi) = = 0, 1111
2. S(Zi) = = 0, 1481
3. S(Zi) = = 0, 3333
4. S(Zi) = = 0, 5185
5. S(Zi) = = 0, 7407

**TABLE 3.3**

**Normality Test of Pre-test at Control Class**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Score** | **F** | **Fcum** | **(Zi)** | **F(Zi)** | **S(Zi)** | **[F(Zi)–S (Zi)]** |
| 1 | 30 | 3 | 3 | -1.7972 | 0.0362 | 0.1111 | 0.0750 |
| 2 | 35 | 1 | 4 | -1.2519 | 0.1053 | 0.1481 | 0.0428 |
| 3 | 40 | 5 | 9 | -0.7067 | 0.2399 | 0.3333 | **0.0934** |
| 4 | 45 | 5 | 14 | -0.1614 | 0.4359 | 0.5185 | 0.0826 |
| 5 | 50 | 6 | 20 | 0.3839 | 0.6495 | 0.7407 | 0.0913 |
| 6 | 55 | 3 | 23 | 0.9291 | 0.8236 | 0.8519 | 0.0283 |
| 7 | 60 | 4 | 27 | 1.4744 | 0.9298 | 1.0000 | 0.0702 |

From the table above, it can be seen that the Liliefors Observation or L0 = 0,0934 with n = 27 and at real level = 0, 05 from the list critical value of Liliefors table, Lt = 0,176. It can be concluded that the data distribution was normal, because L0 (0,0934)< Lt (0, 176).

1. **Normality test of Post-test**

Find Z score by using by using the formula:

Zi=

* + - 1. Zi =  = 1,2999
      2. Zi =  = 0,7546
      3. Zi =  = 0,2094
      4. Zi =  = 0,3359
      5. Zi =  = 0,8811

Find out S(Zi) we use the formula : S(Zi) =

S(Zi) = = 0,1538

S(Zi) = = 0,3846

S(Zi) = = 0,5769

S(Zi) = = 0,7308

S(Zi) = = 0,8462

**TABLE 3.4**

**Normality Test of Post-test at Control Class**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Score** | **F** | **Fcum** | **(Zi)** | **F(Zi)** | **S(Zi)** | **[F(Zi) – S (Zi)]** |
| 1 | 65 | 4 | 4 | -1.2999 | 0.0968 | 0.1538 | 0.0570 |
| 2 | 70 | 6 | 10 | -0.7546 | 0.2252 | 0.3846 | 0.1594 |
| 3 | 75 | 5 | 15 | -0.2094 | 0.4171 | 0.5769 | **0.1598** |
| 4 | 80 | 4 | 19 | 0.3359 | 0.6315 | 0.7308 | 0.0993 |
| 5 | 85 | 3 | 22 | 0.8811 | 0.8109 | 0.8462 | 0.0353 |
| 6 | 90 | 2 | 24 | 1.4264 | 0.9231 | 0.9231 | 0.0000 |
| 7 | 95 | 2 | 26 | 1.9716 | 0.9757 | 1.0000 | 0.0243 |

From the table above, it can be seen that the Liliefors Observation or L0 = 0, 1598 with n = 26 and at real level = 0, 05 from the list critical value of Liliefors table, Lt = 0,176. It can be concluded that the data distribution was normal, because L0 (0, 1598)< Lt (0,176).

**B.3.2 The Calculation of Homogeneity Test**

1. **Homogeneity Test of Pre-test**

**

Where : S12 = the biggest variant

S22 = the smallest variant

Based on the variants of both samples of pre-test found that:

 = 118,1 N = 27

 = 84,0 N = 26

So:

Fcount = 

Fcoun = 

Then the coefficient of Fcount = 1,40 is compared with Ftable, where Ftable is determined at real level =0,05 and the same numerator dk= n-1 (26-1 = 25) that was exist between dk numerator 24 and 30, the denominator dk= n-1 (27-1 = 26).

Because of Fcount< Ft atau (1,40 < 1,95) so it can be concluded that the variant is homogenous.

1. **Homogeneity of Post-test**

**

Where : S12 = the biggest variant

S22 = the smallest variant

Based on the variants of both samples of post-test found that:

 = 92,9 N = 26

 = 102,0 N = 27

So:

Fh = 

Fh = 

Then the coefficient of Fcount = 1,09 is compared with Ftable, where Ftable is determined at real level =0,05 and the same numerator dk= n-1 (26-1 = 25) that was exist between dk numerator 24 and 30, the denominator dk= n-1 (27-1 = 26).

Because of Fcount< Ft atau (1,09 < 1,95) so it can be concluded that the variant is homogenous.

1. **Hypothesis Testing**

The formula of t-test and distribution table of the t-critical values is applied in testing the hypothesis. The testing hypothesis is conducted in order to find out whether the hypothesis is acceptable or rejected. The basic of testing hypothesis is as follows:

**t =**

The calculation of the t-observed :

Ma = 34,03 Mb = 31,11

2 = 0,22 = 0,03

Na = 25 Nb = 26

**t =**

=

=

**=**

=

=

= 4,94

Ha **:**  it means that teaching English by using Audio– Visual significantly affect on the students’ ability in listening comprehension. In other words, Ha is accepted if the t-observed t-table.

After calculating the data, the writer found that t-observed (4,94) was higher than t-table (2, 01) at the level of significance of and at the degree of freedom (df) = Nx + Ny – 2. Where Nx the total numbers of Experimental group is 26 and Ny was the total numbers of control group is 27. Thus, df = 26 + 25 – 2 = 51. Based on the data, it can be concluded that the students’ ability taught by using Audio – Visual media is higher than taught by using audio only.

1. **Research Finding**
   * + 1. Base on the result of the calculation above, it was found that students’ ability in listening comprehension by using audio – visual got mean score of the pre test in experimental group was 46,48 the lowest score is 30, the highest score is 65. Meanwhile Mean score of the post test in experimental group was 82,62 the lowest score is 65, the highest score is 85.
       2. The students’ ability in listening comprehension when the researcher teaching English by using audio only got mean score of pre test in control group was 46,48 the lowest score is 30 and the highest score is 65.Meanwhile the mean score of post test in control group was 77,59 the lowest score is 65 and the highest score is 95. It can be assumed that the treatments have been done successfully.
       3. Based on the statistical computation t-test was found that the coefficient t-observation = 4,94. Where the coefficient of ttable 2.01. It is obtained that t-observation t-table. It means that there was significant effect of using Audio – Visual in teaching English on the students’ ability in listening comprehension. It was indicated that Ha was accepted and Ho was rejected.

**E Discussion**

The media is one factor determining the success of learning. Through audio-visual then the learning process will be more interesting and exciting. Material presented orally by the teacher sometimes not fully understood by the students. Then the media was necessary for the learning process, which is audio-visual to help the learning process in teaching listening comprehension. And as a tool to teaching and learning process that teach the learning material so that the teaching objectives can be achieved with better and more perfect.

Using audio-visual in teaching English can Affect students' ability in listening comprehension, because audiovisual has an element of sound, visual, and gestures. Dale says that (in Arsyad book) using audio-visual in listening teaching is to enable the eyes and ears of students during the learning process. So that the learning process becomes more active[[1]](#footnote-2). Because using audio-visual in teaching listening comprehension students will be more concentration, because they see, hear directly material taught using audio-visual equipment. And audio-visual aid easier for students to be able to digest the information that was submitted directly. And affirmed by Rudy Breatz (in Arsyad books), audio-visual that can Affect students' ability to improve memory, learning outcomes, and comprehension.[[2]](#footnote-3)

According to Azhar Arsyad the advantages of using audio-visual:

1. The teaching materials will be quite vague so it can be understood by students, and students can master English language learning objective in listening comprehension.
2. Teaching will be more varied, not only verbal communication through said by the teacher, so that the students not bored and teachers are not run out of steam when teaching.
3. The students more active learning, such as observe,   
   listen, and comprehendand etc.
4. The use of audio-visual teaching will attract more attention so it can motivate students to learn.
5. Can describe an exact process, and can be witnessed repeatedly.
6. Can stimulate active participation of hearing students, as well as to develop imagination like Wring, drawing, etc.[[3]](#footnote-4)

Kustiyono say that the media is one important component in improving the quality of learning, one of which is an audio-visual.[[4]](#footnote-5) Because of with use of audio-visual teaching materials can facilitate convey. And using audio-visual in teaching listening can enhance students' understanding, presenting interesting material, and get information.

Djamarah say that (in Arsyad book) use of audio- visual book to improve effectiveness and efficient teaching and learning, so that students are able to develop their thinking. Learning to use double senses of hearing and sight that will provide benefits for the students, because the students will learn more focus.[[5]](#footnote-6) This means that students who learn to use audio-visual in teaching listening comprehension will be more concentration in order to understand the material that has been delivered so that students can answer the questions that the teacher.

Teaching is obtained only in the form of words, it is difficult to be imagined and understood by students. Thus the audio-visual media that help the learning process becomes more effective, because the students directly listen, see, and understand directly the same time. Therefore it can be concluded that by using audio-visual can enhance students' skills in listening comprehension.

1. Azhar Arsyad, Media Pembelajaran, Jakarta, Rahjawali Press), 2013. P.8 [↑](#footnote-ref-2)
2. Ibid. P. 35 [↑](#footnote-ref-3)
3. Ibid. P. 30 [↑](#footnote-ref-4)
4. [https://lismurtini270992.wordpress.com/2013/06/18/media-audio-visual-dan multimedia//](https://lismurtini270992.wordpress.com/2013/06/18/media-audio-visual-dan%20multimedia//) Access: Wednesday, April. 27th 2016, 5.45 PM. [↑](#footnote-ref-5)
5. http:sharingmediapembelajaran.blogspot.com/2012/05/20/media-pembelajaran-berbasis-audio.html/ Access: Wednesday, April 27th, 2016, 5.30 PM. [↑](#footnote-ref-6)