

CHAPTER III

DATA PRESENTATION AND ANALYSIS

A. Data Presentation

The data used in this study were collected by the writer from the pre-test, post-test and questionnaire of the experimental and control group. The data are in the form of numbers. The data are score resume of the listening test and value resume of the questionnaire and presented in tables.

Table 1
The Experimental Group's Pre-test Scores, Post-test Scores, and The Increased/ Decreased Scores of Pre and Post-test

No	Respondents	Pre-test Scores	Post-test Scores	Increased/Decreased Scores
1	Iwan	80	80	0
2	Gesang	80	92	12
3	Ferra	76	88	12
4	Dwi Octa	32	52	20
5	Rr. Tanti.P	72	80	8
6	Rahmad. S	72	84	12
7	Satiti Ingasti	72	88	16
8	Binti Muawarah	68	92	24
9	Sidarta	68	88	20
10	Dahlia. F	60	72	12
11	Aliyah	60	80	20
12	Moh. Ali	52	72	20
13	Entusiastik	56	84	28
14	Kanti. S	52	76	24
15	Indah	48	60	28
16	Cahyo	32	52	20
17	Satria. A	80	92	12
18	Yerru	68	76	8
19	Fenindra. D	64	76	12
20	Puspita. A	60	76	16
21	Kenia. A.S	52	80	32
22	Alfauzia	52	80	32
23	Thaifan	52	76	24

24	Zainuddin	48	76	28
25	Tony Priyo	44	60	16
		$\Sigma=60$	$\Sigma=77.28$	

Table 2
The Control Group's Pre-test Scores, Post-test Scores, and The Increased/Decreased Scores of Pre and Post-test

No	Respondents	Pre-test Scores	Post-test Scores	Increased/Decreased Scores
1	Anita Kurnia	84	76	-8
2	Ambarizky	84	78	-6
3	Kartika Dewi	84	72	-12
4	Titien Mutia	80	76	-4
5	Betty Maharani	80	68	-12
6	Endah surya	80	80	0
7	Didin Maharani	80	76	-4
8	Ranggitya	72	56	-16
9	Sri Yatin	72	64	-8
10	Nila	72	76	-4
11	Fristin Indriana	72	72	0
12	Amy	72	80	8
13	Budi Indah. S	72	68	-4
14	Risa. A	76	72	-4
15	Ari Setyorini	76	76	0
16	Dian Anggraeni	68	52	-16
17	Ika Kartika. A	68	76	8
18	Almaidatul	68	68	0
19	Rizal. O.D	68	72	4
20	Emil hartanto	68	64	-4
21	Kartika Rahma	64	60	-4
22	Laura	64	52	8
23	Savita	60	64	4
24	Nurina	60	60	0
25	Anton Tri	60	64	4
		$\Sigma=69.76$	$\Sigma=68.88$	

Table 3
The Experimental Group's Questionnaire Data of The Attention Components

No	Respondents	Attention Components			
		Interest	Boredom	Focus	Understanding
1	Iwan	7	6	5	6
2	Gesang	5	5	6	6
3	Ferra	6	7	6	6
4	Dwi Octa	3	4	5	4
5	Rr. Tanti.P	4	3	1	1
6	Rahmad. S	3	3	5	5
7	Satiti Ingasti	5	4	5	5
8	Binti Muawarah	5	6	1	3
9	Sidarta	4	4	4	6
10	Dahlia. F	5	5	3	3
11	Aliyah	7	1	3	5
12	Moh. Ali	6	5	5	6
13	Entusiastik	3	3	2	2
14	Kanti. S	7	5	2	4
15	Indah	3	2	2	2
16	Cahyo	3	6	4	2
17	Satria. A	6	6	1	3
18	Yerru	6	4	4	5
19	Fenindra. D	1	3	7	7
20	Puspita. A	6	5	4	3
21	Kenia. A.S	6	5	1	1
22	Alfauzia	5	4	1	6
23	Thaifan	5	2	1	4
24	Zainuddin	6	4	1	4
25	Tony Priyo	6	4	1	4

Table 4
The Experimental Group's Questionnaire Data of The Stress Components

No	Respondents	Stress Components		
		Difficulty	Fatigue	Relaxation
1	Iwan	5	6	5
2	Gesang	7	6	5
3	Ferra	6	5	6
4	Dwi Octa	7	6	3
5	Rr. Tanti.P	1	3	5
6	Rahmad. S	3	3	5

7	Satiti Ingasti	4	4	6
8	Binti Muawarah	1	7	1
9	Sidarta	6	5	5
10	Dahlia. F	5	4	3
11	Aliyah	4	2	7
12	Moh. Ali	5	6	5
13	Entusiastik	2	4	3
14	Kanti. S	4	4	4
15	Indah	1	1	3
16	Cahyo	2	4	5
17	Satria. A	3	5	4
18	Yerru	4	3	4
19	Fenindra. D	7	4	1
20	Puspita. A	6	4	3
21	Kenia. A.S	3	5	4
22	Alfauzia	2	4	4
23	Thaifan	3	4	6
24	Zainuddin	4	2	5
25	Tony Priyo	4	2	5

Table 5
The Control Group's Questionnaire Data of The Attention Components

No	Respondents	Attention Components			
		Interest	Boredom	Focus	Understanding
1	Anita Kurnia	4	6	4	3
2	Ambarizky	4	4	2	2
3	Kartika Dewi	5	5	2	3
4	Titien Mutia	4	4	4	3
5	Betty Maharani	2	5	3	3
6	Endah surya	7	5	2	4
7	Didin Maharani	5	5	1	2
8	Ranggitya	6	4	3	3
9	Sri Yatin	6	4	1	5
10	Nila	6	7	2	2
11	Fristin Indriana	6	5	2	3
12	Amy	7	6	4	4
13	Budi Indah. S	5	3	1	3
14	Risa. A	4	2	1	5
15	Ari Setyorini	7	3	1	4
16	Dian Anggraeni	6	4	1	4
17	Ika Kartika. A	5	5	3	2
18	Almaidatul	5	4	4	5
19	Rizal. O.D	4	4	1	4

20	Emil hartanto	6	4	4	3
21	Kartika Rahma	7	4	2	3
22	Savita	3	4	5	4
23	Nurina	5	2	3	4
24	Anton Tri	4	3	1	1
25	Laura	4	5	2	5

Table 6
The Control Group's Questionnaire Data of The Stress Components

No	Respondents	Stress Components		
		Difficulty	Fatigue	Relaxation
1	Anita Kurnia	4	5	4
2	Ambarizky	2	6	4
3	Kartika Dewi	3	1	5
4	Titien Mutia	4	5	5
5	Betty Maharani	4	2	4
6	Endah surya	4	4	4
7	Didin Maharani	4	6	5
8	Ranggitya	5	5	3
9	Sri Yatin	4	4	4
10	Nila	5	7	5
11	Fristin Indriana	4	5	5
12	Amy	3	5	4
13	Budi Indah. S	4	4	5
14	Risa. A	4	6	4
15	Ari Setyorini	4	5	4
16	Dian Anggraeni	4	2	5
17	Ika Kartika. A	5	6	4
18	Almaidatul	1	2	4
19	Rizal. O.D	4	4	4
20	Emil hartanto	2	4	4
21	Kartika Rahma	3	2	4
22	Savita	7	6	3
23	Nurina	2	3	5
24	Anton Tri	1	3	5
25	Laura	3	6	2

B. Data Analysis of Listening Test

Before analyzing the data, the writer states the hypotheses, which are:

Ho: There is no influence of visual aids on the understanding of English spoken text.

Hi: There is influence of visual aids on the understanding of English spoken text.

Ho is referred to as the null hypothesis and the second hypothesis, which is assumed to be true when the null hypothesis is false, is referred to as the alternative hypothesis and is often symbolized H_1 . Hay (269) states that both the null hypothesis and the alternative hypothesis should be stated before any statistical test is attempted.

To verify the tenability of the hypothesis, the writer calculates the data of the pre-test and post-test of both the experimental and control groups using the T-test. Besides the results of the pre-test and post-test of both groups, the writer calculates the increase or decrease of the score obtained from these two groups (see Table 1 & 2).

From Table 1 & 2, it can be seen that 24 respondents of the experimental group had increasing score and 1 respondent had neither increasing nor decreasing score. The highest increasing score of the experimental group is 32 and the lowest one is 8. In the control group, 14 respondents obtained decreasing score, 5 respondents obtained neither increasing nor decreasing score, and 6 respondents obtained increasing score. The highest increasing score of the control group is 8, which is a quarter of the highest increasing score of the experimental group, while

the lowest increasing score of the control group is 4. The lowest decreasing score of the control group is -16 and the highest decreasing score is -4.

To see more clearly about the increasing/decreasing scores of both groups, the scores are put the in the table below:

Table 7
The Exp. & Control Group's Increased/Decreased Score

NO	Exp. Group's Increased/Decreased Score	Control Group's Increased/Decreased Score	d	d ²
1	0	-8	-8	64
2	12	-6	-18	324
3	12	-12	-24	576
4	20	-4	-24	576
5	8	-12	-20	400
6	12	0	-12	144
7	16	-4	-20	400
8	24	-16	-40	1600
9	20	-8	-28	784
10	12	-4	-16	256
11	20	0	-20	400
12	20	8	-12	144
13	28	-4	-32	1024
14	24	-4	-28	784
15	28	0	-28	784
16	20	-16	-36	1296
17	12	8	-4	16
18	8	0	-8	64
19	12	4	-8	64
20	16	-4	-20	400
21	32	-4	-36	1296
22	32	4	-28	784
23	24	0	-24	576
24	28	4	-24	576
25	16	8	-8	64
			$\Sigma = 526$	$\Sigma = 13,396$

From Table 7, the mean of the difference ($|\bar{d}|$) can be drawn. The mean of the difference is an absolute value. It means there is no negative value. The formula of the mean of the difference is as follows:

$$|\bar{d}| = \frac{\sum d}{n}$$

In which $|\bar{d}|$ = the mean of the difference of the pre and post-test's

increased/decreased score

$\sum d$ = total of the difference

n = number of the respondents

The result is as follows:

$$\begin{aligned} |\bar{d}| &= \frac{\sum d}{n} \\ &= \frac{526}{25} \\ &= 21.04 \end{aligned}$$

Then the standard deviation of the difference (S_d) can also be drawn with the formula as follows:

$$S_d = \sqrt{\frac{\sum d^2}{n-1}}$$

In which S_d = standard deviation of the difference

$\sum d$ = total of the difference

n = number of the respondents

The result is as follows:

$$\begin{aligned}
 S_d &= \sqrt{\frac{\sum d^2}{n-1}} \\
 &= \sqrt{\frac{13396}{25-1}} \\
 &= \sqrt{\frac{13396}{24}} \\
 &= \sqrt{558.166} \\
 &= 23.62
 \end{aligned}$$

Next step, the writer will use the formula by which the writer can find the t-value, that is as follows:

$$t = \frac{|\bar{d}|}{\frac{S_d}{\sqrt{n}}}$$

In which t = influence value

$|\bar{d}|$ = the mean of the difference of the pre & post-test's

increased/decreased score

Sd = standard deviation of the difference

n = number of the respondents

Each value of $|\bar{d}|$ and Sd can be inserted into the formula and the result is

as follows:

$$t = \frac{|\bar{d}|}{\frac{S_d}{\sqrt{n}}}$$

$$\begin{aligned}
 &= \frac{21.04}{\frac{23.62}{\sqrt{25}}} \\
 &= \frac{21.04}{\frac{23.62}{5}} \\
 &= \frac{21.04}{4.72} \\
 &= 4.45
 \end{aligned}$$

In order to know the accepted hypothesis, the writer compares the t- value with the t- critical table. To see the t-value in t- critical table, the writer takes the level of significance 90% because the writer can't guarantee that this study is 100% correct. From the level of significance above, the writer can count the level of freedom (α) as follows:

$$\begin{aligned}
 \alpha &= 100\% - 90\% \\
 &= 10\%
 \end{aligned}$$

After obtaining the level of freedom, then the writer inserts it into the formula to find out the borderline of the acceptance and rejection region. The formula is as follows:

$$\begin{aligned}
 &t(n-1 ; \alpha/2) \\
 &t(25-1 ; 10\%/2) \\
 &t(24 ; 5\%)
 \end{aligned}$$

In the t-critical table (see appendix 7), the writer finds the value of t (24 ; 5%) is 1.71

To obtain the accepted hypothesis, the writer draws the diagram of sample space. Hamburge (91) states that sample space is the set of possible values of the sample statistic. It is divided into two parts called the acceptance region and the rejected region. Hereafter, the result of the t-test is presented in the following diagram:

Figure 2#

The Diagram of Acceptance & Rejection Area

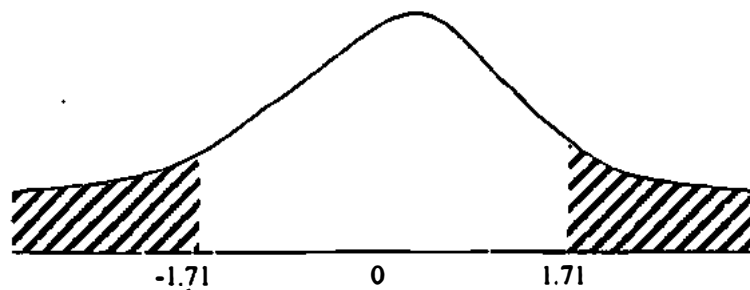


Diagram above shows that t-value, which is 4.45 does not lie between the negative value (-1.71) and the positive value (1.71); thus, the t-value is outside the acceptance region. It means that statistically H_0 is rejected and the alternative hypothesis (H_1) is accepted, therefore, it is verified that picture influences the students' understanding of English Spoken Texts.

C. Data Analysis of Questionnaire

After knowing that there is influence of visual aids on understanding English spoken texts, the writer analyzes the questionnaire data to find out whether the visual aids used in listening class also give positive effects on the

students' attention and stress level. Attention has four components: interest, boredom, focus, and understanding. Stress has three components: difficulty, fatigue, and relaxation.

The questionnaire has a value range that lies from 1 to 7. The highest value is on the left side of the range since the favorable adjectives are in the left side of the continuum. The value of the continuum will be less as it goes to the right. The writer formulates the basis for interpreting the value as follows:

1. Values that lie from 5 to 7 belong to favorable adjective.
2. Values that lie from 1 to 3 belong to unfavorable adjective.
3. Value 4 is ignored. It means that value 4 does not belong to either favorable or unfavorable adjective.
4. Comparing the total percentage of the favorable and the unfavorable adjective.
5. The adjective that has the highest total percentage is considered as the dominant influence of pictures.
6. The interpretation of each component uses the adjective pairs below:

Component aspect	Favorable	Unfavorable
Interest	Big	Little
Boredom	Low	High
Focus	Easy	Difficulty
Understanding	Fast	Slow
Difficulty	Few	Many
Fatigue	Slow	Fast
Relaxation	High	Low

In analyzing the questionnaire data, the writer uses several steps: Firstly, the writer counts the experimental group's percentage of each component of

attention and the total percentage of favorable and unfavorable adjective value range, then put them in two different tables. From the table below, we see the percentage difference of each of attention components clearly.

Table 8
Experimental Group's Percentage of Attention Components

Attention Components	Value							Number	Value %						
	7	6	5	4	3	2	1		7	6	5	4	3	2	1
Interest	3	14	3	2	1	1	1	25	12	56	12	8	4	4	4
Boredom	1	4	11	2	4	2	1	25	4	16	44	8	16	8	4
Focus	1	12	3	2	2	3	2	25	4	48	12	8	8	12	8
Understanding	3	13	2	3	1	1	2	25	12	52	8	12	4	4	8

Attention component	Total percentage of value range of favorable adjective	Total percentage of value range of unfavorable adjective
Interest	80%	12%
Boredom	64%	28%
Focus	64%	28%
Understanding	72%	16%

In the table above we can see that the student total number of the interest value range that lies from 5 to 7 is 20 while for the value range that lies from 1 to 3 is 3. The percentage of favorable adjective value range of interest is much higher than the unfavorable. The percentage of favorable adjective is 80% while the percentage of the unfavorable is 12%. This means the respondents' interest on the topic is big.

The student total number of the boredom value range that lies from 5 to 7 is 16 while for the value range that lies from 3 to 1 is 7. The percentage of favorable adjective value range of boredom is much higher than the unfavorable.

The percentage of favorable adjective is 64% while the percentage of the unfavorable is 28%. This means the respondents' boredom is low.

For the focus on the content, the student total number of the value range that lies from 5 to 7 is 16 while for the value range that lies from 1 to 3 is 7. The percentage of favorable adjective value range of focus is much higher than the unfavorable. The percentage of favorable adjective is 64% while the percentage of the unfavorable is 28%. This means the respondents are easy to focus on the content.

For the understanding, the student total number of the value range that lies from 5 to 7 is 18 while for the value range that lies from 1 to 3 is 4. The percentage of favorable adjective value range of understanding is much higher than the unfavorable. The percentage of favorable adjective is 72% while the percentage of the unfavorable is 16%. This means the respondents are fast to understand the listening.

Secondly, the writer counts the experimental group's percentage of each component of stress and the total percentage of favorable and unfavorable adjective value range, then put them in two different tables.

Table 9
Experimental Group's Percentage of Stress Components

Stress Components	Value							Number	Value %						
	7	6	5	4	3	2	1		7	6	5	4	3	2	1
Difficulty	2	13	3	2	2	2	1	25	8	52	12	8	8	8	4
Fatigue	1	4	4	9	3	3	1	25	4	16	16	36	12	12	4
Relaxation	5	0	2	5	1	3	9	25	36	12	4	20	20	0	8

Stress components	Total percentage of value range of favorable adjective	Total percentage of value range of unfavorable adjective
Difficulty	72%	20%
Fatigue	36%	28%
Relaxation	52%	28%

In the table above we can see that the student total number of the difficulty value range that lies from 5 to 7 is 18 while for the value range that lies from 1 to 3 is 5. The percentage of favorable adjective value range of difficulty is much higher than the unfavorable. The percentage of favorable adjective is 72% while the percentage of the unfavorable is 20%. This means the difficulty of understanding the listening is few.

The student total number of the fatigue value range that lies from 5 to 7 is 9 while for the value range that lies from 1 to 3 is 7. The percentage of favorable adjective value range of fatigue is little bit higher than the unfavorable. The percentage of favorable adjective is 36% while the percentage of the unfavorable is 28%. This means the respondents are slow to feel fatigue in doing the test.

For the relaxed manner in doing the test, the student total number of the value range that lies from 5 to 7 is 13 while for the value range that lies from 1 to 3 is 7. The percentage of favorable adjective value range of relaxed manner is higher than the unfavorable. The percentage of favorable adjective is 52% while the percentage of the unfavorable is 28%. This means the relaxed manner of the respondents in doing the test is high.

Thirdly, after counting the experimental group's percentage of attention and stress components, the writer counts the control group's attention components and the total percentage of favorable and unfavorable adjective value range, then

put them in two different tables. The control group's percentage of attention components as follows:

Table 10
Control Group's Percentage of Attention Components

Attention Components	Value							Number	Value %						
	7	6	5	4	3	2	1		7	6	5	4	3	2	1
Interest	1	1	0	7	4	6	6	25	4	4	0	28	16	24	24
Boredom	3	2	0	10	1	2	7	25	12	8	0	40	4	8	28
Focus	0	0	1	2	4	7	11	25	0	0	4	8	16	28	44
Understanding	0	0	4	7	9	4	1	25	0	0	16	28	36	16	4

Attention component	Total percentage of value range of favorable adjective	Total percentage of value range of unfavorable adjective
Interest	8%	64%
Boredom	20%	40%
Focus	4%	88%
Understanding	16%	56%

In the table above we can see that the student total number of the interest value range that lies from 5 to 7 is 2 while for the value range that lies from 1 to 3 is 16. The percentage of favorable adjective value range of interest is much lower than the unfavorable. The percentage of favorable adjective is 8% while the percentage of the unfavorable is 64%. This means the respondents' interest on the topic is little.

The student total number of the boredom value range that lies from 5 to 7 is 5 while for the value range that lies from 1 to 3 is 10. The percentage of favorable adjective value range of boredom is lower than the unfavorable. The

The percentage of favorable adjective is 20% while the percentage of the unfavorable is 40%. This means the respondents' boredom is high.

For the focus on the content, the student total number of the value range that lies from 5 to 7 is 1 while for the value range that lies from 1 to 3 is 22. The percentage of favorable adjective value range of focus is much lower than the unfavorable. The percentage of favorable adjective is 4% while the percentage of the unfavorable is 88%. This means the respondents are difficult to focus on the content.

For the understanding, the student total number of the value range that lies from 5 to 7 is 4 while for the value range that lies from 1 to 3 is 14. The percentage of favorable adjective value range of interest is much lower than the unfavorable. The percentage of favorable adjective is 16% while the percentage of the unfavorable is 56%. This means the respondents are slow to understand the listening.

Fourthly, the writer counts the control group's percentage of stress components and the total percentage of favorable and unfavorable adjective value range, then put them in two different tables.

Table 11
Control Group's Percentage of Stress Components

Stress Components	Value							Number	Value %						
	7	6	5	4	3	2	1		7	6	5	4	3	2	1
Difficulty	1	0	3	12	4	3	2	25	4	0	12	48	16	12	8
Fatigue	1	1	1	1	2	13	5	25	4	4	4	8	8	52	20
Relaxation	0	0	9	13	2	1	0	25	0	4	8	52	36	0	0

Stress components	Total percentage of value range of favorable adjective	Total percentage of value range of unfavorable adjective
Difficulty	16%	36%
Fatigue	12%	80%
Relaxation	12%	36%

In the table above we can see that the student total number of the difficulty value range that lies from 5 to 7 is 4 while for the value range that lies from 1 to 3 is 9. The percentage of favorable adjective value range of difficulty is much lower than the unfavorable. The percentage of favorable adjective is 16% while the percentage of the unfavorable is 36%. This means that the respondents get many difficulties in understanding the listening.

The student total number of the fatigue value range that lies from 5 to 7 is 3 while for the value range that lies from 1 to 3 is 20. The percentage of favorable adjective value range of fatigue is much lower than the unfavorable. The percentage of favorable adjective is 12% while the percentage of the unfavorable is 80%. This means the respondents are fast to feel fatigue in doing the test.

For the relaxed manner in doing the test, the student total number of the value range that lies from 5 to 7 is 3 while for the value range that lies from 1 to 3 is 9. The percentage of favorable adjective value range of relaxed manner is much lower than the unfavorable. The percentage of favorable adjective is 12% while the percentage of the unfavorable is 36%. This means the relaxed manner of the respondents in doing the test is low.



D. Interpretation

The use of visual aids in English auditory comprehension is a learning method that combines two modalities of learning. Modality of learning is the easiest way to absorb information. As De Porter & Hernacki (112) state, there are three types of learning modalities: visual, auditorial, and kinetic (V-A-K). This study combines the visual and auditorial learning modality.

When we learn something, some people have a tendency to use his own learning modality. Some people are good at visual while some other are good at auditorial modality. Even though we have a tendency to use only single learning modality, some people are able to use either two or all of them. A tendency to use single learning modality becomes a problem in listening class. If a student is good at auditorial learning modality, he will be easier to understand the spoken text than a student that good at the two other learning modalities.

Regarding the pre-test scores of both groups in Table 1 and 2, we can find that the respondents of both groups have different tendencies of using the learning modality. None of the control group respondents get score below 60. The writer can say that the control group's respondents are auditorial type learners. Meanwhile almost fifty percent of the experimental group's respondents get score below 60. This suggests that almost fifty percent of the experimental group's respondents are either visual or kinetic type learners and the rest are auditorial type learners. The use of visual aids helps either the visual or kinetic type learners of the experimental group and the auditorial type learners as well to achieve higher score in their post-test (see Table 2).

The way someone learns is a combination of how he not just absorbs but also arranges and processes information. Arranging and processing the information is brain dominance. V-A-K identification system differentiates how we absorb the information. Gregorc (cited in De Porter & Hernacki 124) divides brain dominance into two parts based on perception in put and in put arrangement ability. To recognize brain dominance of each V-A-K type learner, based on Gregorc's brain dominance of perception in put we know that the visual and kinetic type learners rely on concrete perception while the auditorial type learner relies on abstract perception.

Brain has a very important role in processing language. Santrock (321) points out that a specific area in the brain's left hemisphere, called Wernicke's area, facilitates language comprehension. Tomlinson-Leasey (356) maintains that if a foreign language is learned in infancy period, they are likely to be coded in the left hemisphere just as the first language. Based on that theory, the opposite condition happens to the respondents of both groups who learn English spoken texts after infancy period. Their right hemisphere becomes more involved when they learn English spoken texts. Some of language functions are stored in right hemisphere. One of those functions is learning new language.

Referring to Gregorc's two possible brain dominance of V-A-K type learner, we know that at the same hemisphere, that is right hemisphere, the respondents who are auditorial type learners process abstract perception while either the visual or kinetic type learners process the concrete perception. Even though all the respondents learn English spoken text after infancy period in which

the brain's right hemisphere is supposed to be involved more, the writer thinks that their brain laterization of learning foreign language will change to left hemisphere after a learner can master the language. At high level of foreign language competence, that language has become a second language in which the process of brain laterization will be the same with the case of bilingual.

When we use visual aids in understanding English spoken texts, there is a series of process that occurs in the respondents' mind before the understanding comes up as the result of the process. The series of process that occurs in the brain also involves other sense organs, that is, eye and ear. When a learner listens to a spoken text, it is heard as sounds. The inside organs of ear are under control of brain stem or reptile brain. The brain stem is responsible for sensor motor functions. Sensor motor function is a knowledge of physical reality from the sense organs. The stimuli that the ear captures in the form of sound waves are transferred to limbic system or mammal brain. Limbic system is a major control panel that uses information from sense organs and body sensation as the in-put.

From the limbic system the stimuli are transmitted and distributed to neo-cortex. Neo-cortex is the brain's thinking part, which is human intelligence. Neo-cortex arranges messages that are received through sense organs and body sensation. The processes that come from this arrangement are intellectual thinking, decision making, behavior, language, motoric control and non-verbal idea. In case of listening, language and non-verbal idea are the most dominant arrangement processes of neo-cortex which is presented in the form of understanding speeches. The process of understanding is begun with receiving the

stimuli by auditorial cortex through ears, then that stimuli are transmitted to Heschl's gyrus which is in the up side temporal lobus. From Heschl's gyrus, the stimuli are transmitted to Wernicke's area which is in the back up side of temporal lobus to be coded.

When a learner listens to a spoken text with visual aids, he receives two perception stimuli at once time. He receives the abstract perception stimuli from the listening and the concrete perception stimuli from the visual aids. The eye's inside organs which are under control of brain stem capture the stimuli in the form of symbols. The symbols and the sound wave stimuli are transmitted to the limbic system. The process in neo-cortex is more complicated because two processes, that are understanding pictures and speeches, occur at the same time. The process of understanding pictures is begun with receiving symbols by visual cortex in the back side of occipital lobus through eyes, then that symbols are transmitted to Wernicke's area through angular gyrus to be coded.

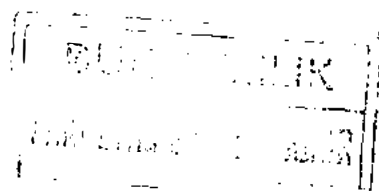
When we hear someone talks, however, we do not hear the speaker says the words one by one. Our memory in long term memory of limbic system has stored words including the meaning, the knowledge of the source and target language, and the real world knowledge. To understand English spoken texts, our brain has to set a part all various, random, and complicated in put. Continually, our brain has to define every single word in the context of preceding and following words and works together with the knowledge of the source and target language, and the real world knowledge (De Porter & Hernacki 151-152). When we listen to the spoken texts with visual aids, the additional process is retaining

the in put in the form of pictures. Our brain uses auditorial and visual in put in a pattern of related ideas

Two different perception stimuli that are received at once time in neo-cortex strengthen the mind's work. Another process that occurs in neo-cortex is creating. imagination of what is being heard. By using visual aids, the experimental group respondents are easier to understand the content of the story. This understanding occurs since the visual aids stimulate the respondents' mind to create an imagination about the story that is being heard. Without the visual aids the control group respondents are difficult to imagine the story. It is difficult to concentrate on the story that is heard 'blind'; on the other hand, it is far easier to focus when there is something relevant to look at.

Among all senses, eye is more involved in learning. The sharpest perception and sensation come through the eye. We believe more what we see than what we hear. Listening with visual aids takes the advantage of vision dominance in learning. The respondents can rely on the pictorial representation for keeping records of what they hear. The visual image will be retained in our memory.

As well as taking an important role of processes in the brain, the use of visual aids also influences another part of learning process. As we know, learning involves not only the brain process but also psychological process. When we learn English spoken texts, having difficulty in understanding what the native speaker is saying is a part of learning process.



According to Ur (3-8), general difficulties that always come up when a learner listens to English spoken texts such as:

- **Hearing the sound.** It is a difficulty in perceiving certain English sounds because these do not exist (at all, or as separate phonemes) in a learner's own language.
- **Understanding accent, intonation and stress.** The English systems of stress, intonation and rhythm are perhaps less difficult than problems of the actual sound. However, it can interfere with a learner's proper understanding of spoken language. The native speaker's accent also sounds strange to a learner.
- **Coping with redundancy and 'noise'.** When listening to recording, a learner has to put up with a certain amount of 'noise'. Some words may be drowned by outside interference, others indistinctly pronounced.
- **Sound-combination.** A learner is not familiar enough with the sound-combination, lexis and collocations of the language to make predictions or retroactive guesses as to what is missing.
- **Predicting.** If a learner can make a guess as the sort of thing that is going to be told, they will be much more to perceive it and understanding it well. Prediction is difficult for a learner for various reasons. Intonation and stress pattern play an important part in supplying ground for certain kinds of expectation.
- **Understanding colloquial vocabulary.** It is fairly obvious that a learner is not yet familiar sufficiently with the words and to identify them when they occur within the swift stream of speech. A learner simply does not have time to search his memory for the meaning of something that they do not immediately recall.

Generally, it occurs to the learners that they unconsciously tend to focus more on the perception ability rather than on comprehension ability. Without visual aids, the perception ability is a very dominant factor in every listening comprehension test. It means that the learners must have good perception ability to comprehend the content of the story. Actually, the core of those difficulties is concerned with the words. Because they focus more on the words rather than on the content of the story, they can not be relaxed in doing the test. They do the test with high concentration that needs much energy and they become easily tired.

The difficulties can cause psychological problems such as losing interest, getting bored, losing focus, and fatigue. A learner can do listening well if he can overcome those psychological problem. In the tables of semantic differential scale questionnaire results, we can see the difference of the respondents' psychological condition of both groups when they are doing the test. The use of visual aids can reduce the students' level of stress and increase attention. The visual aids make the respondents of the experimental group interested in the topic. Their interest in the topic prevents them from getting tired and bored to the listening. Listening becomes a pleasurable activity that can be done in a relaxed manner. The visual aids also help them to focus on and understand the listening. They can do the test easily because they understand the listening.

When comparing the results of the control group's pre-and post-test, the writer does not find any score increase. Supported by the control group's questionnaire results, we may say that the decrease of the test results is caused by some factors such as fatigue, boredom and forgetting. The effect of fatigue toward

the control group is high. It depends on how hard the respondents need to concentrate and on their ability to do so for a long period. It is certainly a fact that in a long listening comprehension exercise, respondents' grasp of the content is much better at the beginning and gets progressively worse as they go on. This is partly due to psychological factors. The respondents tend to perceive and remember the first of a series of aural stimuli better than they do later ones. This seems to be the reason why most of the control group's respondents can not answer the questions of the last part of the spoken text correctly.

For the experimental group, those difficulties can be reduced by the use of visual aids. They do not need to focus on every single word. The visual aids can keep them focused more on the content of the story rather than on every single word. They can be relaxed in doing the test. They do not need much energy to concentrate as needed by the control group nor become easily tired.

According to Davidoff (129), ordinarily, people focus on a mere trickle of impressions during every waking enormous of stimuli competence for our attention. We call this selective openness to a small of impinging sensory phenomena attention. There are some factors attracting attention. One of them is interest). Dealing with listening to English spoken texts, it is much more interesting to respond actively (listening aided by visual aids) than to listen passively (listening without using visual aids). The use of visual aids is to help respondents to concentrate their attention for a period of time. The questionnaire result of the experimental group shows that the respondents are interested in pictures that seem of practical relevance that arouse or stimulate them. Pictures do

a great towards arousing interest even if not a particularly high standard of sophistication, and make the topic more interesting.

Like learning other things, attentional processes are fundamentally important in learners' thinking when they are listening to English spoken texts. According to Gibson and Rader (cited in Berk 281), attentional process is important because attention determines the source of what will be considered in any exercise or problem. When attentional processes are operating at its best, the individual picks up aspects of stimulus environment that have optimal utility for the exercise at hand. Stimulus environment is environment clue that is often likely to provide information about the situation, speaker, and general atmosphere and the actual topic of discourse. The experimental group respondents get the environmental clues from the visual aids. The respondents can focus more on the content of the spoken text than on every single word and the sentences. The visual aids can also help the respondents easier to refer to their background knowledge that is stored in their long term-memory. This background knowledge is needed in either top-down or bottom-up listening process.

CHAPTER IV

CONCLUSION AND SUGGESTION