Appendix 1:

Criteria scoring by oral proficiency scoring categories (Brown, 2001, pp. 406-407) and has modified by the researcher.

Criteria	Score
FLUENCY	
Speaking with many pauses	1
Speaking too slowly	2
Speaking generally at normal speed	3
Speaking fluently	4
PRONUNCIATION	
Speaking words incomprehensibly	1
Speaking with incorrect pronunciation but still understandable	2
Speaking with several incorrect pronunciation	3
Speaking with correct pronunciation (5 point)	4
ACCURACY	
Make a serious errors and message difficult to understand	1
The errors present in speech would frequently create a confusion	2
The speech is still understood although consist of many errors	3
the message would be easily comprehended, because too little errors.	4
VOCABULARY	
The story lacked needed words or misused words	1
Use several vocabulary that is needed	2
Use the vocabulary necessary to speak about.	3
Lots of detail. A wide variety of vocabulary words.	4
COMPREHENSIBILITY	
Story was difficult to follow. Speech was choppy.	1
Story was little difficult to follow.	2

Story was fairly easy to follow, but there were a few rough spots.	3
Story was easy to understand. It was a complete story, with a beginning, middle, and end.	4
PERFORMANCE SKILL	
The voice is inaudible, no facial expression, and not communicative.	1
Mumbling, flat facial expression, and less communicative	2
Speaking in soft voice, but can be understood, good facial expression and communicative enough.	3
Speaking clearly and loudly, good facial expression, and communicative.	4
TOTAL	24

Appendix 2:

Table A9 The Pearson product–moment correlation coefficient

The table gives the critical values of the Pearson product–moment correlation coefficient, r, for different numbers of pairs of observations, N. For significance, the calculated value of r must be *greater than or equal to* the critical value.

	Significance level: two-tailed/non-directional			
	0.20	*0.10*	*0.05*	*0.01*
	Significance level: one-tailed/directional			
N	*0.10*	*0.05*	*0.025*	*0.005*
3	0.951	0.988	0.997	1.000
4	0.800	0.900	0.950	0.990
5	0.687	0.805	0.878	0.959
6	0.608	0.729	0.811	0.917
7	0.551	0.669	0.754	0.875
8	0.507	0.621	0.707	0.834
9	0.472	0.582	0.666	0.798
10	0.443	0.549	0.632	0.765
11	0.419	0.521	0.602	0.735
12	0.398	0.497	0.576	0.708
13	0.380	0.476	0.553	0.684
14	0.365	0.458	0.532	0.661
15	0.351	0.441	0.514	0.641
16	0.338	0.426	0.497	0.623
17	0.327	0.412	0.482	0.606
18	0.317	0.400	0.468	0.590
19	0.308	0.389	0.456	0.575
20	0.299	0.378	0.444	0.561
21	0.291	0.369	0.433	0.549
22	0.284	0.360	0.423	0.537
23	0.277	0.352	0.413	0.526
24	0.271	0.344	0.404	0.515
25	0.265	0.337	0.396	0.505
26	0.260	0.330	0.388	0.496
27	0.255	0.323	0.381	0.487
28	0.250	0.317	0.374	0.479
29	0.245	0.311	0.367	0.471
30	0.241	0.306	0.361	0.463
40	0.207	0.264	0.312	0.403
50	0.184	0.235	0.279	0.361
60	0.168	0.214	0.254	0.330
70	0.155	0.198	0.235	0.306
80	0.145	0.185	0.220	0.286
90	0.136	0.174	0.207	0.270
100	0.129	0.165	0.197	0.256
200	0.091	0.117	0.139	0.182

Appendix 3:

Table for calculating the reliability of instrument.

Students	Rater 1 (X)	Rater 2 (Y)	$(X)^2$	$(Y)^2$	XY
1	50	42	2500	1764	2100
2	46	46	2116	2116	2116
3	54	58	2916	3364	3132
4	42	46	2116	2116	1932
5	63	58	3969	3364	3654
6	46	67	2116	4489	3082
7	50	54	2500	2916	2700
8	50	46	2500	2116	2300
9	46	58	2116	3364	2668
10	50	54	2500	2916	2700
11	46	42	2116	1000	1932
12	50	46	2500	2116	2300
13	46	58	2116	3364	2668
14	58	50	3364	2500	2900
15	58	58	3364	3364	3364
16	54	46	2916	2116	2484
17	58	58	3364	3364	3364
18	58	58	3364	3364	3364
19	63	54	3969	2916	3402
20	54	58	2916	3364	3132
21	67	71	4489	5041	4757
22	58	63	3364	3969	3654
23	54	58	2916	3364	3132
24	46	46	2116	2116	2116
25	54	42	2916	1000	2268
26	54	50	2916	2500	2700
27	54	54	2916	2916	2916
28	58	58	3364	3364	3364
29	54	50	2500	2500	2500
30	46	54	2116	2916	2484
sum	1587	1603	84951	85679	85185
mean	53.13793103	53.43333333			

The Calculation of Reliability of The test by Using Pearson-Product Moment

A. Computing means

$$\bar{y} = \frac{\sum y}{N} = \frac{1587}{30} = 53$$

$$\bar{x} = \frac{\sum x}{N} = \frac{1603}{30} = 53.43$$

B. Standard Deviation

$S_x = \sqrt{\frac{\sum x^2}{N} - \bar{x}^2}$	$S_y = \sqrt{\frac{\sum y^2}{N} - \bar{y}^2}$
$= \sqrt{\frac{84951}{30} - (53.13)^2}$	$= \sqrt{\frac{85679}{30} - (53.4)^2}$
$= \sqrt{2832 - 2813}$	$= \sqrt{2856 - 2852}$
$= \sqrt{19}$	$= \sqrt{4}$
$= 4.36$	$= 2$

C. Pearson r

$$r = \frac{\frac{\sum xy}{N} - \bar{x}\bar{y}}{S_x S_y}$$

$$= \frac{\frac{85185}{30} - (53)(53.43)}{(4.4)(2)}$$

$$= \frac{2840 - 2832}{8.8}$$

$$= \frac{8}{8.8}$$

$$= .9$$

r = very high

Appendix 4:

Table for calculating the reliability of pretest.

Students	Rater 1 (X)	Rater 2 (Y)	$(X)^2$	$(Y)^2$	XY
1	42	50	1764	2500	2100
2	46	46	2116	2116	2116
3	58	54	3364	2916	3132
4	46	42	2116	2116	1932
5	58	63	3364	3969	3654
6	67	46	4489	2116	3082
7	54	50	2916	2500	2700
8	46	50	2116	2500	2300
9	58	46	3364	2116	2668
10	54	50	2916	2500	2700
11	42	46	1000	2116	1932
12	46	50	2116	2500	2300
13	58	46	3364	2116	2668
14	50	58	2500	3364	2900
15	58	58	3364	3364	3364
16	46	54	2116	2916	2484
17	58	58	3364	3364	3364
18	58	58	3364	3364	3364
19	54	63	2916	3969	3402
20	58	54	3364	2916	3132
21	71	67	5041	4489	4757
22	63	58	3969	3364	3654
23	58	54	3364	2916	3132
24	46	46	2116	2116	2116
25	42	54	1000	2916	2268
26	50	54	2500	2916	2700
27	54	54	2916	2916	2916
28	58	58	3364	2916	2916
29	50	50	2500	2500	2500
30	54	46	2916	2116	2484
sum	1603	1583	85679	84503	84737
mean	53.43333333	52.76666667			

The Calculation of Reliability of The pre-test by Using Pearson-Product Moment

A. Computing means

$$\bar{x} = \frac{\sum x}{N} = \frac{1603}{30} = 53.4$$

$$\bar{y} = \frac{\sum y}{N} = \frac{1583}{30} = 52.7$$

B. Standard Deviation

$S_x = \sqrt{\frac{\sum x^2}{N} - \bar{x}^2}$ $= \sqrt{\frac{85679}{30} - (53.4)^2}$ $= \sqrt{2856 - 2852}$ $= \sqrt{4}$ $= 2$	$S_y = \sqrt{\frac{\sum y^2}{N} - \bar{y}^2}$ $= \sqrt{\frac{84503}{30} - (52.7)^2}$ $= \sqrt{2817 - 2777}$ $= \sqrt{40}$ $= 6.3$

C. Pearson r

$$r = \frac{\frac{\sum xy}{N} - \bar{x}\bar{y}}{S_x S_y}$$

$$= \frac{\frac{84737}{30} - (53.4)(52.7)}{(2)(6.3)}$$

$$= \frac{2825 - 2814}{12.6}$$

$$= \frac{11}{12.6}$$

$$= .87 \ (very - high)$$

Appendix 5:

Table for calculating the reliability of posttest.

Students	Rater 1 (X)	Rater 2 (Y)	$(X)^2$	$(Y)^2$	XY
1	79	83	6241	6889	6557
2	79	77	6241	5929	6083
3	88	67	7744	4489	5896
4	67	71	4489	5041	4757
5	67	79	4489	6241	5293
6	88	83	7744	6889	7304
7	79	75	6241	5625	5925
8	79	79	6241	6241	6241
9	79	75	6241	5625	5925
10	77	71	5929	5041	5467
11	67	75	4489	5625	5025
12	67	75	4489	5625	5025
13	71	71	5041	5041	5325
14	67	75	4489	5625	5025
15	79	75	6241	5625	5925
16	71	67	5041	4489	4757
17	79	71	6241	5041	5609
18	71	79	5041	6241	5609
19	67	79	4489	6241	5293
20	75	71	5625	5041	5325
21	83	79	6889	6241	6557
22	75	67	5625	4489	5025
23	83	79	6889	6241	6557
24	71	83	5041	6889	5893
25	71	67	5041	4489	4757
26	79	71	6241	5041	5609
27	63	67	3669	4489	4221
28	71	75	5041	5625	5325
29	75	79	5625	6241	5925
30	75	75	5625	5625	5625
sum	2242	2240	168472	167974	167860
mean	74.73333333	74.66666667			

The Calculation of Reliability of The post-test by Using Pearson-Product Moment

A. Computing means

$$\bar{x} = \frac{\sum x}{N} = \frac{2242}{30} = 74.7$$

$$\bar{y} = \frac{\sum y}{N} = \frac{2240}{30} = 74.6$$

B. Standard Deviation

$S_x = \sqrt{\frac{\sum x^2}{N} - \bar{x}^2}$ $= \sqrt{\frac{168472}{30} - (74.7)^2}$ $= \sqrt{5616 - 5580}$ $= \sqrt{36}$ $= 6$	$S_y = \sqrt{\frac{\sum y^2}{N} - \bar{y}^2}$ $= \sqrt{\frac{167974}{30} - (74.6)^2}$ $= \sqrt{5599 - 5565}$ $= \sqrt{34}$ $= 5.8$

C. Pearson r

$$r = \frac{\frac{\sum xy}{N} - \bar{x}\bar{y}}{S_x S_y}$$

$$= \frac{\frac{167860}{30} - (74.7)(74.6)}{(6)(5.8)}$$

$$= \frac{5595 - 5573}{34.8}$$

$$= \frac{22.38}{34.8}$$

$$= .67$$

r = strong

Appendix 6:

The Result of Pre-test of Experimental and Control Group

Students	Experimental (X_1)	Control (X_2)	$(X_1)^2$	$(X_2)^2$
1	42	50	1764	2500
2	46	50	2116	2500
3	58	63	3364	3969
4	46	42	2116	2116
5	58	63	3364	3969
6	67	46	4489	2116
7	54	50	2916	2500
8	46	50	2116	2500
9	58	46	3364	2116
10	54	50	2916	2500
11	42	46	1000	2116
12	46	50	2116	2500
13	58	42	3364	1000
14	50	58	2500	3364
15	58	58	3364	3364
16	46	54	2116	2916
17	58	58	3364	3364
18	58	58	3364	3364
19	54	63	2916	3969
20	58	54	3364	2916
21	71	67	5041	4489
22	63	58	3969	3364
23	58	54	3364	2916
24	46	46	2116	2116
25	42	54	1000	2916
26	50	54	2500	2916
27	54	54	2916	2916
28	58	54	3364	2916
29	50	50	2500	2500
30	54	54	2916	2916
sum	1603	1596	85679	85624
mean	53.43333333	53.2		

The Calculation of the Pre-test Experimental and Control Group

A. Computing means

$$\bar{x}_1(e) = \frac{\sum x_1}{N} = \frac{1603}{30} = 53.4$$

$$\bar{x}_2(c) = \frac{\sum x_1}{N} = \frac{1596}{30} = 53.2$$

B. Standard Deviation

$$S_{x1} = \sqrt{\frac{\sum x^2}{N} - \bar{x}^{-2}}$$
$$= \sqrt{\frac{85679}{30} - (53.4)^2}$$
$$= \sqrt{2856 - 2852}$$
$$= \sqrt{4}$$
$$= 2$$

$$S_{x2} = \sqrt{\frac{\sum x^2}{N} - \bar{x}^{-2}}$$
$$= \sqrt{\frac{85624}{30} - (53.2)^2}$$
$$= \sqrt{2854 - 2830}$$
$$= \sqrt{24}$$
$$= 4.8$$

C. Computing Standard Error of differences

$$S_{Dx} = \sqrt{\frac{Nx_1 Sx_1^2 + Nx_2 Sx_2^2}{N_1 + N_2 - 2}\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}$$

$$= \sqrt{\frac{30\,(2)^2 + 30\,(4.8)^2}{30 + 30 - 2}\left(\frac{1}{30} + \frac{1}{30}\right)}$$

$$= \sqrt{\frac{30\,(4) + 30\,(24)}{58}\left(\frac{2}{30}\right)}$$

$$= \sqrt{\frac{120 + 720}{58}(0.067)}$$

$$= \sqrt{840\,(0.067)}$$

$$= \sqrt{56.28}$$

$$= 7.5$$

D. Computing *t- value*

$$t = \frac{\overline{x_1} - \overline{x_2} - 0}{S_{Dx}} = \frac{53.4 - 53.2 - 0}{7.5} = \frac{0.2}{7.5} = .02$$

E. Computing Degree of Freedom

df = N1 + N2 - 2

= 30 + 30 - 2

= 58

F. Checking the significance of the difference by consulting table E

t = .02 $t_{.05}$ = .254

t value < $t_{.001}$ = not significant

Appendix 7:

The Result of Post-test of Experimental and Control Groups

Students	Experimental (Y_1)	Control (Y_2)	$(Y_1)^2$	$(Y_2)^2$
1	79	54	6241	2916
2	79	46	6241	2116
3	88	63	7744	3969
4	67	50	4489	2500
5	67	58	4489	3364
6	88	58	7744	3364
7	79	54	6241	2916
8	79	54	6241	2916
9	79	67	6241	4489
10	77	54	5929	2916
11	67	54	4489	2916
12	67	58	4489	3364
13	71	67	5041	4489
14	67	71	4489	5041
15	79	58	6241	3364
16	71	63	5041	3969
17	79	58	6241	3364
18	71	75	5041	5625
19	67	63	4489	3969
20	75	54	5625	2916
21	83	67	6889	4489
22	75	58	5625	3364
23	83	54	6889	2916
24	71	46	5041	2116
25	71	67	5041	4489
26	79	54	6241	2916
27	63	54	3669	2916
28	71	58	5041	3364
29	75	50	5625	2500
30	75	54	5625	2916
sum	2242	1741	9650	6090
mean	74.73333333	58.03333333		

The Calculation of the Post-test Experimental and Control Group

A. Computing means

$$\bar{y}_1(e) = \frac{\sum y_1}{N} = \frac{2242}{30} = 74.7$$

$$\bar{y}_2(c) = \frac{\sum y_2}{N} = \frac{1741}{30} = 58.03$$

B. Standard Deviation

$Sy_1 = \sqrt{\frac{\sum y_1^2}{N} - \bar{y}_1^2}$ $= \sqrt{\frac{168472}{30} - (74.7)^2}$ $= \sqrt{5616 - 5580}$ $= \sqrt{36}$ $= 6$	$Sy_2 = \sqrt{\frac{\sum y_2^2}{N} - \bar{y}_2^2}$ $= \sqrt{\frac{102469}{30} - (58.03)^2}$ $= \sqrt{3416 - 3367.5}$ $= \sqrt{49}$ $= 7$

C. Computing Standard Error of differences

$$S_{Dx} = \sqrt{\frac{Ny_1 Sy_1^2 + Ny_2 Sy_2^2}{N_1 + N_2 - 2}\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}$$

$$= \sqrt{\frac{30\ (6)^2 + 30\ (7)^2}{30 + 30 - 2}\left(\frac{1}{30} + \frac{1}{30}\right)}$$

$$= \sqrt{\frac{30\ (36) + 30\ (49)}{58}\left(\frac{2}{30}\right)}$$

$$= \sqrt{\frac{1080 + 1470}{58}(0.067)}$$

$$= \sqrt{\frac{2550}{58}(0.067)}$$

$$= \sqrt{43.96\ (0.067)}$$

$$= \sqrt{2.94}$$

$$= 1.7$$

D. Computing t- value

$$t = \frac{\overline{y_1} - \overline{y_2} - 0}{S_{Dx}} = \frac{74.7 - 58.03 - 0}{1.7} = \frac{16.67}{1.7} = 9.8$$

E. Computing Degree of Freedom

df = N1 + N2 - 2

= 30 + 30 - 2

= 58

F. Checking the significance of the difference by consulting table E

t = 9.8 $t_{.001}$ = .254

t_{value} > t .05 = significant

Appendix 8:

Pre-test Score of Experimental Group

students	Experimental (X1)						Score/max score X100
	Fluency	Pronunciation	Accuracy	Vocabulary	Comprehensibility	Performance	
1	2	1	2	2	1	2	42
2	3	2	2	1	2	2	46
3	3	1	2	3	2	3	58
4	2	2	2	1	2	2	46
5	3	2	2	3	2	2	58
6	3	2	3	3	2	3	67
7	2	2	2	2	2	3	54
8	1	2	2	2	2	2	46
9	2	2	3	3	2	2	58
10	2	2	2	2	2	3	54
11	2	2	2	1	2	2	42
12	2	2	2	2	1	2	46
13	3	2	2	2	3	2	58
14	2	2	2	2	2	2	50
15	2	2	3	2	2	3	58
16	2	1	2	2	2	2	46
17	3	2	3	2	2	2	58
18	3	2	3	2	2	2	58
19	3	2	2	1	2	3	54
20	2	2	2	2	3	3	58
21	3	2	3	3	3	3	71
22	3	2	3	2	3	2	63
23	3	2	3	2	2	2	58
24	2	2	2	2	1	2	46
25	2	1	1	2	2	2	42
26	2	2	2	2	2	2	50
27	2	2	3	2	2	2	54
28	3	2	2	2	2	3	58
29	2	2	2	2	2	2	50
30	3	3	1	2	1	3	54
sum	72	57	67	61	60	70	1603

Note: max score= 24

Appendix 9:

Pre-test Score of Control Group

students	Control (X2)						Score/ max score X 100
	Fluency	Pronunciation	Accuracy	Vocabulary	Comprehensibility	Performance	
1	2	2	2	2	2	3	50
2	2	3	2	2	1	2	50
3	2	2	3	2	3	3	63
4	3	2	1	1	2	2	42
5	2	3	3	2	3	2	63
6	2	2	1	1	2	3	46
7	2	2	2	2	2	2	50
8	2	1	2	2	3	2	50
9	1	2	3	2	2	1	46
10	2	3	2	2	1	2	50
11	1	2	1	3	2	2	46
12	2	2	2	3	1	2	50
13	2	1	1	2	2	2	42
14	2	2	3	2	2	3	58
15	1	3	3	3	2	2	58
16	2	2	2	2	2	3	54
17	3	2	2	3	2	2	58
18	2	2	3	2	2	3	58
19	3	2	1	3	3	3	63
20	3	2	2	3	1	2	54
21	3	3	2	2	3	3	67
22	2	3	3	1	3	2	58
23	3	2	3	1	2	2	54
24	3	1	2	2	1	2	46
25	2	2	2	2	2	3	54
26	1	3	2	3	2	2	54
27	2	1	2	2	3	3	54
28	2	2	2	3	1	3	54
29	2	3	1	2	2	2	50
30	3	2	2	2	2	2	54
sum	64	64	62	64	61	70	1596

Note: max score= 24

Appendix 10:

Post-test Score Experimental Group

students	Experimental (Y1)						Score/ max score X 100
	Fluency	Pronunciation	Accuracy	Vocabulary	Comprehensibility	Performance	
1	3	2	4	3	3	4	79
2	3	3	3	4	3	3	79
3	4	2	4	4	3	4	88
4	3	2	2	3	3	3	67
5	4	1	3	3	3	2	67
6	4	3	3	4	3	4	88
7	3	2	4	3	4	3	79
8	3	3	4	3	3	3	79
9	3	3	4	3	3	3	79
10	3	2	3	2	4	3	77
11	3	3	3	3	2	2	67
12	3	2	3	2	3	3	67
13	4	2	2	2	3	4	71
14	3	1	3	3	3	3	67
15	3	3	3	4	3	3	79
16	3	2	3	3	3	3	71
17	4	2	3	4	3	3	79
18	2	3	3	3	3	3	71
19	3	2	2	3	3	3	67
20	3	2	3	4	3	3	75
21	4	3	3	3	4	3	83
22	2	2	3	4	3	4	75
23	3	3	3	4	3	4	83
24	3	3	3	2	3	3	71
25	3	2	3	2	3	4	71
26	3	3	3	3	4	3	79
27	2	2	3	2	3	3	63
28	4	2	2	3	3	3	71
29	3	3	3	3	3	3	75
30	4	3	3	2	2	4	75
sum	95	71	67	91	92	96	2242

Note: max score= 24

Appendix 11:

Post-test Score of Control Group

students	Experimental (Y2)						Score/ max score X 100
	Fluency	Pronunciation	Accuracy	Vocabulary	Comprehensibility	Performance	
1	2	2	2	3	2	2	54
2	2	2	2	2	1	2	46
3	2	2	2	3	3	3	63
4	2	2	2	1	2	3	50
5	2	3	2	2	3	2	58
6	2	2	2	3	2	3	58
7	2	2	2	2	2	3	54
8	2	2	2	2	3	2	54
9	3	2	3	3	3	2	67
10	2	3	2	2	2	2	54
11	2	2	2	3	2	2	54
12	2	2	2	3	2	3	58
13	3	3	2	3	2	3	67
14	3	2	3	3	3	3	71
15	1	3	3	3	2	2	58
16	3	2	2	3	2	3	63
17	3	2	2	3	2	2	58
18	3	3	3	3	3	3	75
19	3	2	1	3	3	3	63
20	3	2	2	3	1	2	54
21	3	3	2	2	3	3	67
22	2	3	3	1	3	2	58
23	3	2	3	1	2	2	54
24	3	1	2	2	1	2	46
25	2	2	3	3	3	3	67
26	1	3	2	3	2	2	54
27	2	1	2	2	3	3	54
28	2	2	2	3	2	3	58
29	2	3	1	2	2	2	50
30	3	2	2	2	2	2	54
sum	70	67	65	74	68	74	1741

Note: max score= 24

Appendix 12:

Post-test score of Experimental and Control Groups in Term of Fluency

Students	Experimental (Y_1)	Control (Y_2)	$(Y_1)^2$	$(Y_2)^2$
1	13	8	169	64
2	13	8	169	64
3	17	8	289	64
4	13	8	169	64
5	17	8	289	64
6	17	8	289	64
7	13	8	169	64
8	13	8	169	64
9	13	13	169	169
10	13	8	169	64
11	13	8	169	64
12	13	8	169	64
13	17	13	289	169
14	13	13	169	169
15	13	4	169	16
16	13	13	169	169
17	17	13	289	169
18	8	13	64	169
19	13	13	169	169
20	13	13	169	169
21	17	13	289	169
22	8	8	64	64
23	13	13	169	169
24	13	13	169	169
25	13	8	169	64
26	13	4	169	16
27	8	8	64	64
28	17	8	289	64
29	13	8	169	64
30	17	13	289	169
sum	407	292	5715	3084
mean	13.56666667	9.733333333		

The Calculation of the Post-test Experimental and Control Group in Term of Fluency

A. Computing means

$$\bar{y}_1(e) = \frac{\sum y_1}{N} = \frac{407}{30} = 13.5$$

$$\bar{y}_2(c) = \frac{\sum y_2}{N} = \frac{292}{30} = 9.7$$

B. Standard Deviation

$Sy_1 = \sqrt{\frac{\sum y_1^2}{N} - \bar{y}_1^2}$ $= \sqrt{\frac{5715}{30} - (13.6)^2}$ $= \sqrt{190.5 - 185}$ $= \sqrt{5.5}$ $= 2.34$	$Sy_2 = \sqrt{\frac{\sum y_2^2}{N} - \bar{y}_2^2}$ $= \sqrt{\frac{3084}{30} - (9.7)^2}$ $= \sqrt{102.8 - 94.09}$ $= \sqrt{8.71}$ $= 2.95$

C. Computing Standard Error of differences

$$
\begin{aligned}
S_{Dx} &= \sqrt{\frac{Ny_1 Sy_1^2 + Ny_2 Sy_2^2}{N_1 + N_2 - 2}\left(\frac{1}{N_1} + \frac{1}{N_2}\right)} \\
&= \sqrt{\frac{30\,(2.34)^2 + 30\,(2.95)^2}{30 + 30 - 2}\left(\frac{1}{30} + \frac{1}{30}\right)} \\
&= \sqrt{\frac{30\,(5.47) + 30\,(8.7)}{58}\left(\frac{2}{30}\right)} \\
&= \sqrt{\frac{164 + 261}{58}(0.067)} \\
&= \sqrt{\frac{425}{58}(0.067)} \\
&= \sqrt{7.32\,(0.067)} \\
&= \sqrt{0.49} \\
&= 0.7
\end{aligned}
$$

D. Computing t- value

$$t = \frac{\overline{y_1} - \overline{y_2} - 0}{S_{Dx}} = \frac{13.5 - 9.7 - 0}{0.8} = \frac{3.8}{0.7} = 5.42$$

E. Computing Degree of Freedom

df = N1 + N2 - 2

= 30 + 30 - 2

= 58

F. Checking the significance of the difference by consulting table E

t = 5.42 $t_{.001}$ = .254

$t_{value} > t\ .05$ = Significant

Appendix 13:

Post-test score of Experimental and Control Groups in Term of Pronunciation.

Students	Experimental (Y_1)	Control (Y_2)	$(Y_1)^2$	$(Y_2)^2$
1	8	8	64	64
2	13	8	169	64
3	8	8	64	64
4	8	8	64	64
5	4	13	16	169
6	13	8	169	64
7	8	8	64	64
8	13	8	169	64
9	13	8	169	64
10	8	13	64	169
11	13	8	169	64
12	8	8	64	64
13	8	13	64	169
14	4	8	16	64
15	13	13	169	169
16	8	8	64	64
17	8	8	64	64
18	13	13	169	169
19	8	8	64	64
20	8	8	64	64
21	13	13	169	169
22	8	13	64	169
23	13	8	169	64
24	13	4	169	16
25	8	8	64	64
26	13	13	169	169
27	8	4	64	16
28	8	8	64	64
29	13	13	169	169
30	13	8	169	169
sum	297	277	3189	2874
mean	9.9	9.233333333		

Note: max score= 24

The Calculation of the Post-test Experimental and Control Group in Term of pronunciation

A. Computing means

$$\bar{y}_1(e) = \frac{\sum y_1}{N} = \frac{297}{30} = 9.9$$

$$\bar{y}_2(c) = \frac{\sum y_2}{N} = \frac{277}{30} = 9.23$$

B. Standard Deviation

$S_{x1} = \sqrt{\frac{\sum y_1^2}{N} - \bar{y_1}^2}$	$S_{x2} \sqrt{\frac{\sum y_2^2}{N} - \bar{y_2}^2}$
$= \sqrt{\frac{3189}{30} - (9.9)^2}$	$= \sqrt{\frac{2874}{30} - (9.23)^2}$
$= \sqrt{106.3 - 98.01}$	$= \sqrt{95.8 - 85.19}$
$= \sqrt{8.29}$	$= \sqrt{10.61}$
$= 2.9$	$= 3.2$

C. Computing Standard Error of differences

$$S_{Dx} = \sqrt{\frac{Ny_1 Sy_1^2 + Ny_2 Sy_2^2}{N_1 + N_2 - 2}\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}$$

$$= \sqrt{\frac{30\,(2.9)^2 + 30\,(3.2)^2}{30 + 30 - 2}\left(\frac{1}{30} + \frac{1}{30}\right)}$$

$$= \sqrt{\frac{30\,(8.29) + 30\,(10.61)}{58}\left(\frac{2}{30}\right)}$$

$$= \sqrt{\frac{248.7 + 318.3}{58}(0.067)}$$

$$= \sqrt{\frac{567}{58}(0.067)}$$

$$= \sqrt{9.8(0.067)}$$

$$= \sqrt{0.65}$$

$$= 0.81$$

D. Computing t- value

$$t = \frac{\overline{y_1} - \overline{y_2} - 0}{S_{Dx}} = \frac{9.9 - 9.23 - 0}{0.81} = \frac{0.67}{0.81} = .08$$

E. Computing Degree of Freedom

df = N1 + N2 - 2

= 30 + 30 - 2

= 58

F. Checking the significance of the difference by consulting table E

t = .08 $t_{.05}$ = .254

$t_{value} < t\ .05$ = not significant

Appendix 14:

The Post-test Score of Experimental and Control Groups in Term of Accuracy.

Students	Experimental (Y_1)	Control (Y_2)	$(Y_1)^2$	$(Y_2)^2$
1	8	8	64	64
2	8	8	64	64
3	8	8	64	64
4	8	8	64	64
5	8	8	64	64
6	13	8	169	64
7	8	8	64	64
8	4	8	16	64
9	13	13	169	169
10	8	8	64	64
11	8	8	64	64
12	8	8	64	64
13	8	8	64	64
14	13	13	169	169
15	8	13	64	169
16	13	8	169	64
17	13	8	169	64
18	13	13	169	169
19	4	4	16	16
20	8	8	64	64
21	8	8	64	64
22	13	13	169	169
23	8	13	64	169
24	13	8	169	64
25	8	13	64	169
26	8	8	64	64
27	8	8	64	64
28	8	8	64	64
29	8	4	64	16
30	8	8	64	64
sum	272	267	2664	2559
mean	9.066666667	8.9		

Note: max score= 24

The Calculation of the Post-test Experimental and Control Group in Term of Accuracy

A. Computing means

$$\bar{y}_1(e) = \frac{\sum y_1}{N} = \frac{272}{30} = 9.06$$

$$\bar{y}_2(c) = \frac{\sum y_2}{N} = \frac{267}{30} = 8.9$$

B. Standard Deviation

$Sy_1 = \sqrt{\frac{\sum y_1^2}{N} - \bar{y}_1^2}$ $= \sqrt{\frac{2664}{30} - (9.06)^2}$ $= \sqrt{88.8 - 82.08}$ $= \sqrt{6.72}$ $= 2.6$	$Sy_2 = \sqrt{\frac{\sum y_2^2}{N} - \bar{y}_2^2}$ $= \sqrt{\frac{2559}{30} - (8.9)^2}$ $= \sqrt{85.3 - 79.21}$ $= \sqrt{6.09}$ $= 2.46$

C. Computing Standard Error of differences

$$S_{Dx} = \sqrt{\frac{Ny_1 Sy_1^2 + Ny_2 Sy_2^2}{N_1 + N_2 - 2}\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}$$

$$= \sqrt{\frac{30\,(2.6)^2 + 30\,(2.46)^2}{30 + 30 - 2}\left(\frac{1}{30} + \frac{1}{30}\right)}$$

$$= \sqrt{\frac{30\,(6.72) + 30\,(6.09)}{58}\left(\frac{2}{30}\right)}$$

$$= \sqrt{\frac{201.6 + 182.7}{58}(0.067)}$$

$$= \sqrt{\frac{384.3}{58}(0.067)}$$

$$= \sqrt{6.6(0.067)}$$

$$= \sqrt{0.44}$$

$$= 0.68$$

D. Computing t- value

$$t = \frac{\overline{y_1} - \overline{y_2} - 0}{S_{Dx}} = \frac{9.06 - 8.9 - 0}{0.68} = \frac{0.16}{0.68} = 0.23$$

E. Computing Degree of Freedom

df = N1 + N2 - 2

= 30 + 30 - 2

= 58

F. Checking the significance of the difference by consulting table E

t = .23 $t_{.001}$ = .245

t_{value} > t .05 = not significant

Appendix 15:

The Post-test Score of Experimental and Control Groups in Term of Vocabulary.

Students	Experimental (Y_1)	Control (Y_2)	$(Y_1)^2$	$(Y_2)^2$
1	17	8	289	64
2	13	8	169	64
3	17	8	289	64
4	8	8	64	64
5	13	8	169	64
6	13	8	169	64
7	17	8	289	64
8	17	8	289	64
9	17	13	289	169
10	13	8	169	64
11	13	8	169	64
12	13	8	169	64
13	8	8	64	64
14	13	13	169	169
15	13	13	169	169
16	13	8	169	64
17	13	8	169	64
18	13	13	169	169
19	8	17	64	289
20	13	8	169	64
21	13	8	169	64
22	13	13	169	169
23	13	13	169	169
24	13	8	169	64
25	13	13	169	169
26	13	8	169	64
27	13	8	169	64
28	8	8	64	64
29	13	17	169	289
30	13	8	169	64
sum	390	293	5250	3105
mean	13	9.766666667		

Note: max score= 24

The Calculation of the Post-test Experimental and Control Group in Term of vocabulary.

A. Computing means

$$\bar{y}_1(e) = \frac{\sum y_1}{N} = \frac{390}{30} = 13$$

$$\bar{y}_2(c) = \frac{\sum y_2}{N} = \frac{293}{30} = 9.7$$

B. Standard Deviation

$Sy_1 = \sqrt{\frac{\sum y_1^2}{N} - \bar{y_1}^2}$ $= \sqrt{\frac{5250}{30} - (13)^2}$ $= \sqrt{175 - 169}$ $= \sqrt{6}$ $= 2.4$	$Sy_2 = \sqrt{\frac{\sum y_2^2}{N} - \bar{y_2}^2}$ $= \sqrt{\frac{3105}{30} - (9.7)^2}$ $= \sqrt{103.5 - 94.09}$ $= \sqrt{9.41}$ $= 3.06$

C. Computing Standard Error of differences

$$S_{Dx} = \sqrt{\frac{Ny_1 Sy_1^2 + Ny_2 Sy_2^2}{N_1 + N_2 - 2}\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}$$

$$= \sqrt{\frac{30\,(2.4)^2 + 30\,(3.06)^2}{30 + 30 - 2}\left(\frac{1}{30} + \frac{1}{30}\right)}$$

$$= \sqrt{\frac{30\,(5.76) + 30\,(9.36)}{58}\left(\frac{2}{30}\right)}$$

$$= \sqrt{\frac{172.8 + 280.9}{58}(0.067)}$$

$$= \sqrt{\frac{453.7}{58}(0.067)}$$

$$= \sqrt{7.82\,(0.067)}$$

$$= \sqrt{0.52}$$

$$= 0.72$$

D. Computing t- value

$$t = \frac{\overline{y_1} - \overline{y_2} - 0}{S_{Dx}} = \frac{13 - 9.76 - 0}{0.72} = \frac{3.24}{0.72} = 4.5$$

E. Computing Degree of Freedom

df = N1 + N2 - 2

= 30 + 30 - 2

= 58

F. Checking the significance of the difference by consulting table E

t = 4.5 $t_{.001}$ = .245

t_{value} > t .05 = Significant

Appendix 16:

The Post-test Score of Experimental and Control Groups in Term of Comprehensibility.

Students	Experimental (Y_1)	Control (Y_2)	$(Y_1)^2$	$(Y_2)^2$
1	13	8	169	64
2	13	4	169	16
3	13	13	169	169
4	13	8	169	64
5	13	13	169	169
6	13	8	169	64
7	17	8	289	64
8	13	13	169	169
9	13	3	169	169
10	17	8	289	64
11	8	8	64	64
12	13	8	169	64
13	13	8	169	64
14	13	13	169	169
15	13	8	169	64
16	13	8	169	64
17	13	8	169	64
18	13	13	169	169
19	13	13	169	169
20	13	4	169	16
21	17	13	289	169
22	13	13	169	169
23	13	8	169	64
24	13	4	169	16
25	13	13	169	169
26	17	8	289	64
27	13	13	169	169
28	13	8	169	64
29	13	8	169	64
30	8	8	64	64
sum	396	273	5340	2931
mean	13.2	9.1		

Note: max score= 24

The Calculation of the Post-test Experimental and Control Group in Term of Comprehensibility.

A. Computing means

$$\bar{y}_1(e) = \frac{\sum y_1}{N} = \frac{396}{30} = 13.2$$

$$\bar{y}_2(c) = \frac{\sum y_2}{N} = \frac{273}{30} = 9.1$$

B. Standard Deviation

$Sy_1 = \sqrt{\frac{\sum y_1^{\,2}}{N} - \overline{y_1}^{\,2}}$ $= \sqrt{\frac{5340}{30} - (13.2)^2}$ $= \sqrt{178 - 174.24}$ $= \sqrt{3.76}$ $= 1.9$	$Sy_2 = \sqrt{\frac{\sum y_2^{\,2}}{N} - \overline{y_2}^{\,2}}$ $= \sqrt{\frac{2931}{30} - (9.1)^2}$ $= \sqrt{97.7 - 82.8}$ $= \sqrt{14.89}$ $= 4.34$

C. Computing Standard Error of differences

$$S_{Dx} = \sqrt{\frac{Ny_1 Sy_1^2 + Ny_2 Sy_2^2}{N_1 + N_2 - 2}\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}$$

$$= \sqrt{\frac{30(1.9)^2 + 30(4.34)^2}{30 + 30 - 2}\left(\frac{1}{30} + \frac{1}{30}\right)}$$

$$= \sqrt{\frac{30(3.61) + 30(18.83)}{58}\left(\frac{2}{30}\right)}$$

$$= \sqrt{\frac{108.3 + 564.9}{58}(0.067)}$$

$$= \sqrt{\frac{673.2}{58}(0.067)}$$

$$= \sqrt{11.6(0.067)}$$

$$= \sqrt{0.77}$$

$$= 0.87$$

D. Computing t- value

$$t = \frac{\overline{y_1} - \overline{y_2} - 0}{S_{Dx}} = \frac{13.2 - 9.1 - 0}{0.87} = \frac{4.1}{0.87} = 4.7$$

E. Computing Degree of Freedom

df = N1 + N2 - 2

= 30 + 30 - 2

= 58

F. Checking the significance of the difference by consulting table E

t = 4.7 $t_{.001}$ = .245

t_{value} > t .05 = Significant

Appendix 17:

The Post-test Score of Experimental and Control Groups in Term of Performance Skill.

Students	Experimental (Y_1)	Control (Y_2)	$(Y_1)^2$	$(Y_2)^2$
1	17	8	289	64
2	13	8	169	64
3	17	13	16	169
4	13	13	169	169
5	8	8	64	64
6	17	13	289	169
7	13	13	169	169
8	13	8	169	64
9	13	8	169	64
10	13	8	169	64
11	8	8	64	64
12	13	13	169	169
13	17	13	289	169
14	13	13	169	169
15	13	8	169	64
16	13	13	169	169
17	13	8	169	64
18	13	13	169	169
19	13	13	169	169
20	13	8	169	64
21	13	13	169	169
22	17	8	289	64
23	17	8	289	169
24	13	8	169	64
25	17	13	289	169
26	13	8	169	64
27	13	13	169	169
28	13	13	169	169
29	13	8	169	64
30	17	8	289	64
sum	412	310	5547	3495
mean	13.73333333	10.33333333		

Note: max score= 24

The Calculation of the Post-test Experimental and Control Group in Term of Performance Skill.

A. Computing means

$$\bar{y}_1(e) = \frac{\sum y_1}{N} = \frac{412}{30} = 13.7$$

$$\bar{y}_2(c) = \frac{\sum y_2}{N} = \frac{310}{30} = 10.3$$

B. Standard Deviation

$Sy_1 = \sqrt{\frac{\sum y_1^2}{N} - \overline{y_1}^2}$ $= \sqrt{\frac{5820}{30} - (13.7)^2}$ $= \sqrt{194 - 187.69}$ $= \sqrt{6.31}$ $= 2.51$	$Sy_2 = \sqrt{\frac{\sum y_2^2}{N} - \overline{y_2}^2}$ $= \sqrt{\frac{3495}{30} - (10.3)^2}$ $= \sqrt{116.5 - 106.9}$ $= \sqrt{9.6}$ $= 3.1$

C. Computing Standard Error of differences

$$S_{Dx} = \sqrt{\frac{Ny_1 Sy_1^2 + Ny_2 Sy_2^2}{N_1 + N_2 - 2}\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}$$

$$= \sqrt{\frac{30\,(2.51)^2 + 30\,(3.1)^2}{30 + 30 - 2}\left(\frac{1}{30} + \frac{1}{30}\right)}$$

$$= \sqrt{\frac{30\,(6.31) + 30\,(9.6)}{58}\left(\frac{2}{30}\right)}$$

$$= \sqrt{\frac{189.3 + 288}{58}(0.067)}$$

$$= \sqrt{\frac{477.3}{58}(0.067)}$$

$$= \sqrt{8.2(0.067)}$$

$$= \sqrt{0.54}$$

$$= 0.74$$

D. Computing t- value

$$t = \frac{\overline{y_1} - \overline{y_2} - 0}{S_{Dx}} = \frac{13.7 - 10.3 - 0}{0.74} = \frac{3.4}{0.74} = 4.6$$

E. Computing Degree of Freedom

df = N1 + N2 - 2

= 30 + 30 - 2

= 58

F. Checking the significance of the difference by consulting table E

t = 4.6 $t_{.001}$ = .245

t_{value} > t .05 = Significant