

Appendix 16

Distribution Frequency of Pretest Score in Experimental class

Statistics

Pretest Score in Experimental Class

N	Valid	36
	Missing	0
Mean		59.1194
Median		60.0000
Mode		66.60
Std. Deviation		7.39856
Variance		54.739
Range		23.40
Minimum		46.60
Maximum		70.00
Sum		2128.30

Pretest Score in Experimental Class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	46.60	5	13.9	13.9	13.9
	50.00	2	5.6	5.6	19.4
	53.30	4	11.1	11.1	30.6
	56.60	3	8.3	8.3	38.9
	60.00	7	19.4	19.4	58.3
	63.30	4	11.1	11.1	69.4
	66.30	1	2.8	2.8	72.2
	66.60	8	22.2	22.2	94.4
	70.00	2	5.6	5.6	100.0
	Total	36	100.0	100.0	

Appendix 17

Distribution Frequency of Posttest Score in Experimental class

Statistics

Posttest Score in Experimental Class

N	Valid	36
	Missing	0
Mean		73.8389
Median		73.3000
Mode		73.30
Std. Deviation		7.20893
Variance		51.969
Range		26.60
Minimum		60.00
Maximum		86.60
Sum		2658.20

Posttest Score in Experimental Class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60.00	3	8.3	8.3	8.3
	66.30	2	5.6	5.6	13.9
	66.60	4	11.1	11.1	25.0
	70.00	4	11.1	11.1	36.1
	73.30	7	19.4	19.4	55.6
	76.60	5	13.9	13.9	69.4
	80.00	6	16.7	16.7	86.1
	83.30	3	8.3	8.3	94.4
	86.60	2	5.6	5.6	100.0
	Total	36	100.0	100.0	

Appendix 18

Distribution Frequency of Pretest Score in Control Class

Statistics

Pretest Score in Control Class

N	Valid	36
	Missing	0
Mean		56.4472
Median		56.6000
Mode		63.30
Std. Deviation		7.03438
Variance		49.483
Range		23.30
Minimum		43.30
Maximum		66.60
Sum		2032.10

Pretest Score in Control Class

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 43.30	1	2.8	2.8	2.8
46.60	5	13.9	13.9	16.7
50.00	5	13.9	13.9	30.6
53.30	5	13.9	13.9	44.4
56.60	3	8.3	8.3	52.8
60.00	6	16.7	16.7	69.4
63.30	7	19.4	19.4	88.9
66.60	4	11.1	11.1	100.0
Total	36	100.0	100.0	

Appendix 19

Distribution Frequency of Pretest Score in Control Class

Statistics

Posttest Score in Control Class

N	Valid	36
	Missing	0
Mean		63.2111
Median		66.6000
Mode		70.00
Std. Deviation		6.59912
Variance		43.548
Range		23.30
Minimum		50.00
Maximum		73.30
Sum		2275.60

Posttest Score in Control Class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50.00	2	5.6	5.6	5.6
	53.30	2	5.6	5.6	11.1
	56.60	6	16.7	16.7	27.8
	60.00	6	16.7	16.7	44.4
	63.30	1	2.8	2.8	47.2
	66.60	8	22.2	22.2	69.4
	70.00	10	27.8	27.8	97.2
	73.30	1	2.8	2.8	100.0
	Total	36	100.0	100.0	

Normality of Pretest and Posttest in Experimental Class

The Data of Pretest in Experimental Class

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest Score in Experimental Class	36	59.1194	7.39856	46.60	70.00

One-Sample Kolmogorov-Smirnov Test

			Pretest Score in Experimental Class
N			36
Normal Parameters ^{a,b}	Mean		59.1194
	Std. Deviation		7.39856
Most Extreme Differences	Absolute		.158
	Positive		.100
	Negative		-.158
Kolmogorov-Smirnov Z			.951
Asymp. Sig. (2-tailed)			.326

a. Test distribution is Normal.

b. Calculated from data.

The Data of Posttest in Experimental Class

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Posttest Score in Experimental Class	36	73.8389	7.20893	60.00	86.60

One-Sample Kolmogorov-Smirnov Test

			Posttest Score in Experimental Class
N			36
Normal Parameters ^{a,b}	Mean		73.8389
	Std. Deviation		7.20893
Most Extreme Differences	Absolute		.109
	Positive		.092
	Negative		-.109
Kolmogorov-Smirnov Z			.655
Asymp. Sig. (2-tailed)			.784

a. Test distribution is Normal.

b. Calculated from data.

Appendix 21

Normality of Pretest and Posttest in Control Class

The Data of Pretest in Control Class

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Pretest Score in Control Class	36	56.4472	7.03438	43.30	66.60

One-Sample Kolmogorov-Smirnov Test

			Pretest Score in Control Class
N			36
Normal Parameters ^{a,b}	Mean		56.4472
	Std. Deviation		7.03438
Most Extreme Differences	Absolute		.165
	Positive		.126
	Negative		-.165
Kolmogorov-Smirnov Z			.993
Asymp. Sig. (2-tailed)			.278

a. Test distribution is Normal.

b. Calculated from data.

The Data of Posttest in Control Class

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Posttest Score in Control Class	36	63.2111	6.59912	50.00	73.30

One-Sample Kolmogorov-Smirnov Test

			Posttest Score in Control Class
N			36
Normal Parameters ^{a,b}	Mean		63.2111
	Std. Deviation		6.59912
Most Extreme Differences	Absolute		.224
	Positive		.131
	Negative		-.224
Kolmogorov-Smirnov Z			1.344
Asymp. Sig. (2-tailed)			.080

a. Test distribution is Normal.

b. Calculated from data.

Appendix 22

The Increase of Students' Vocabulary in Experimental and Control Class

The Increase of Students' Vocabulary in Experimental Class

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest Score in Experimental Class	59.1194	36	7.39856	1.23309
	Posttest Score in Experimental Class	73.8389	36	7.20893	1.20149

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest Score in Experimental Class & Posttest Score in Experimental Class	36	.881	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest Score in Experimental Class - Posttest Score in Experimental Class	-14.71944	3.56297	.59383	-15.92498	-13.51391	-24.787	35	.000

The Increase of Students' Vocabulary in Control Class

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest Score in Control Class	56.4472	36	7.03438	1.17240
	Posttest Score in Control Class	63.2111	36	6.59912	1.09985

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pretest Score in Control Class & Posttest Score in Control Class	36	.563	.000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest Score in Control Class - Posttest Score in Control Class	-6.76389	6.38289	1.06381	-8.92355	-4.60423	-6.358	35	.000

Appendix 23

Homoogeneity of Pretest in Experimental and Control Class

Group Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
Pretest	Experimental Class	36	59.1194	7.39856	1.23309
	Control Class	36	56.4472	7.03438	1.17240

Independent Samples Test

		Levene's Test fo Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pretest	Equal variances assumed	.007	.932	1.571	70	.121	2.67222	1.70148	-.72127	6.06572
	Equal variances not assumed			1.571	69.822	.121	2.67222	1.70148	-.72143	6.06587

Appendix 24

The analysis of the Hypothesis

Group Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
Posttest	Experimental Class	36	73.8389	7.20893	1.20149
	Control Class	36	63.2111	6.59912	1.09985

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Posttest	Equal variances assumed	.001	.974	6.525	70	.000	10.62778	1.62888	7.37908	13.87648
	Equal variances not assumed			6.525	69.460	.000	10.62778	1.62888	7.37863	13.87692