**Lampiran 9 : Output Uji Normalitas**

**Output Uji Normalitas Kelas Kontrol**

|  |  |  |  |
| --- | --- | --- | --- |
| **One-Sample Kolmogorov-Smirnov Test** | | | |
|  | | Pretest\_kontrol | Posttest\_kontrol |
| N | | 26 | 26 |
| Normal Parametersa,b | Mean | 17.6923 | 20.0000 |
| Std. Deviation | 4.52344 | 3.66606 |
| Most Extreme Differences | Absolute | .152 | .123 |
| Positive | .146 | .091 |
| Negative | -.152 | -.123 |
| Kolmogorov-Smirnov Z | | .777 | .629 |
| Asymp. Sig. (2-tailed) | | .583 | .824 |
| a. Test distribution is Normal. | | | |
| b. Calculated from data. | | | |

**Output Uji Normalitas Kelas Eksperimen**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **One-Sample Kolmogorov-Smirnov Test** | | | | |
|  | | Pretest\_eksperimen | Posttest\_eksperimen | |
| N | | 22 | 22 | |
| Normal Parametersa,b | Mean | 17.7727 | 20.9545 | |
| Std. Deviation | 5.55434 | 5.23247 | |
| Most Extreme Differences | Absolute | .201 | .261 | |
| Positive | .101 | .124 | |
| Negative | -.201 | -.261 | |
| Kolmogorov-Smirnov Z | | .944 | 1.224 | |
| Asymp. Sig. (2-tailed) | | .335 | .100 | |
| a. Test distribution is Normal. | | | |
| b. Calculated from data. | | | |

**Lampiran 10 : Uji Homogenitas**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test of Homogeneity of Variances** | | | |
| Pretest Kelas Kontrol | | | |
| Levene Statistic | df1 | df2 | Sig. |
| 1.632 | 6 | 15 | .206 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Test of Homogeneity of Variances** | | | |
| Pretest Kelas Eksperimen | | | |
| Levene Statistic | df1 | df2 | Sig. |
| 1.854 | 4 | 10 | .195 |

**Lampiran 11 : Uji *Independent Sample T test***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Group Statistics** | | | | | |
|  | Grup | N | Mean | Std. Deviation | Std. Error Mean |
| N-Gain Eksperimen  N-Gain Kontrol | | 22 | .2723 | .16753 | .03572 |
| 26 | .1546 | .20561 | .04032 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 |
| Equal variances assumed  Equal variances not assumed | .471 | .496 | 2.147 | 46 | .037 | .11766 | .05480 | .00735 | .22797 |
|  |  | 2.184 | 45.947 | .034 | .11766 | .05387 | .00923 | .22609 |

**Lampiran 12 : Rekapitulasi Nilai *Pretest*, *Posttest*, dan N-Gain**

**Kelas Kontrol**

|  |  |  |  |
| --- | --- | --- | --- |
| **Nomor Siswa** | ***Pretest*** | ***Posttest*** | **N-Gain** |
| 1. | 25 | 26 | 0.20 |
| 2. | 14 | 14 | 0.00 |
| 3. | 13 | 19 | 0.35 |
| 4. | 14 | 15 | 0.06 |
| 5. | 16 | 17 | 0.07 |
| 6. | 14 | 18 | 0.25 |
| 7. | 14 | 12 | -0.13 |
| 8. | 12 | 19 | 0.39 |
| 9. | 22 | 21 | -0.13 |
| 10. | 21 | 20 | -0.11 |
| 11. | 26 | 26 | 0.00 |
| 12. | 16 | 21 | 0.36 |
| 13. | 25 | 26 | 0.20 |
| 14. | 9 | 23 | 0.67 |
| 15. | 16 | 19 | 0.21 |
| 16. | 22 | 23 | 0.13 |
| 17. | 21 | 20 | -0.11 |
| 18. | 22 | 23 | 0.13 |
| 19. | 15 | 17 | 0.13 |
| 20. | 21 | 23 | 0.22 |
| 21. | 18 | 23 | 0.42 |
| 22. | 13 | 15 | 0.12 |
| 23. | 21 | 19 | -0.22 |
| 24. | 14 | 19 | 0.31 |
| 25. | 18 | 22 | 0.33 |
| 26. | 18 | 20 | 0.17 |
| **Rata-rata** | 17.69 | 20.00 | 0.15 |

**Kelas Eksperimen**

|  |  |  |  |
| --- | --- | --- | --- |
| **Nomor Siswa** | ***Pretest*** | ***Posttest*** | **N-Gain** |
| 1. | 8 | 13 | 0.23 |
| 2. | 14 | 24 | 0.63 |
| 3. | 14 | 23 | 0.56 |
| 4. | 21 | 22 | 0.11 |
| 5. | 20 | 23 | 0.30 |
| 6. | 10 | 11 | 0.05 |
| 7. | 20 | 23 | 0.30 |
| 8. | 18 | 24 | 0.50 |
| 9. | 14 | 17 | 0.19 |
| 10. | 17 | 20 | 0.23 |
| 11. | 23 | 24 | 0.14 |
| 12. | 25 | 27 | 0.40 |
| 13. | 20 | 22 | 0.20 |
| 14. | 23 | 24 | 0.14 |
| 15. | 25 | 26 | 0.20 |
| 16. | 25 | 27 | 0.40 |
| 17. | 8 | 12 | 0.18 |
| 18. | 8 | 10 | 0.09 |
| 19. | 20 | 23 | 0.30 |
| 20. | 20 | 24 | 0.40 |
| 21. | 17 | 17 | 0.00 |
| 22. | 21 | 25 | 0.44 |
| **Rata-rata** | 17.77 | 20.95 | 0.27 |

**Lampiran 13 : Persentase Skor Nilai Pretest dan Posttest**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Pretest\_Kontrol | Posttets\_Kontrol | Pretest\_Eksperimen | Posttest\_Eksperimen |
| N | Valid | 26 | 26 | 22 | 22 |
| Missing | 0 | 0 | 4 | 4 |
| Mean | | 59.2692 | 67.0385 | 59.5909 | 70.1364 |
| Median | | 57.0000 | 67.0000 | 67.0000 | 77.0000 |
| Mode | | 47.00 | 77.00 | 67.00 | 80.00 |
| Std. Deviation | | 15.16986 | 12.26860 | 18.53609 | 17.34879 |
| Variance | | 230.125 | 150.518 | 343.587 | 300.981 |
| Range | | 57.00 | 47.00 | 57.00 | 56.00 |
| Minimum | | 30.00 | 40.00 | 27.00 | 34.00 |
| Maximum | | 87.00 | 87.00 | 84.00 | 90.00 |
| Sum | | 1541.00 | 1743.00 | 1311.00 | 1543.00 |

**Frequency Table**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Pretest\_Kontrol** | | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent | |
| Valid | 30.00 | 1 | 3.8 | 3.8 | 3.8 | |
| 40.00 | 1 | 3.8 | 3.8 | 7.7 | |
| 43.00 | 1 | 3.8 | 3.8 | 11.5 | |
| 44.00 | 1 | 3.8 | 3.8 | 15.4 | |
| 47.00 | 5 | 19.2 | 19.2 | 34.6 | |
| 50.00 | 1 | 3.8 | 3.8 | 38.5 | |
| 54.00 | 3 | 11.5 | 11.5 | 50.0 | |
| 60.00 | 3 | 11.5 | 11.5 | 61.5 | |
| 70.00 | 4 | 15.4 | 15.4 | 76.9 | |
| 74.00 | 3 | 11.5 | 11.5 | 88.5 | |
| 84.00 | 2 | 7.7 | 7.7 | 96.2 | |
| 87.00 | 1 | 3.8 | 3.8 | 100.0 | |
| Total | 26 | 100.0 | 100.0 |  | |
| **Posttets\_Kontrol** | | | | | | |
|  | | Frequency | Percent | Valid Percent | | Cumulative Percent |
| Valid | 40.00 | 1 | 3.8 | 3.8 | | 3.8 |
| 47.00 | 1 | 3.8 | 3.8 | | 7.7 |
| 50.00 | 2 | 7.7 | 7.7 | | 15.4 |
| 57.00 | 2 | 7.7 | 7.7 | | 23.1 |
| 60.00 | 1 | 3.8 | 3.8 | | 26.9 |
| 64.00 | 4 | 15.4 | 15.4 | | 42.3 |
| 65.00 | 1 | 3.8 | 3.8 | | 46.2 |
| 67.00 | 3 | 11.5 | 11.5 | | 57.7 |
| 70.00 | 2 | 7.7 | 7.7 | | 65.4 |
| 74.00 | 1 | 3.8 | 3.8 | | 69.2 |
| 77.00 | 5 | 19.2 | 19.2 | | 88.5 |
| 87.00 | 3 | 11.5 | 11.5 | | 100.0 |
| Total | 26 | 100.0 | 100.0 | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Pretest\_Eksperimen** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 27.00 | 3 | 11.5 | 13.6 | 13.6 |
| 34.00 | 1 | 3.8 | 4.5 | 18.2 |
| 47.00 | 3 | 11.5 | 13.6 | 31.8 |
| 57.00 | 2 | 7.7 | 9.1 | 40.9 |
| 60.00 | 1 | 3.8 | 4.5 | 45.5 |
| 67.00 | 5 | 19.2 | 22.7 | 68.2 |
| 70.00 | 2 | 7.7 | 9.1 | 77.3 |
| 77.00 | 2 | 7.7 | 9.1 | 86.4 |
| 84.00 | 3 | 11.5 | 13.6 | 100.0 |
| Total | 22 | 84.6 | 100.0 |  |
| Missing | System | 4 | 15.4 |  |  |
| Total | | 26 | 100.0 |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Posttest\_Eksperimen** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 34.00 | 1 | 3.8 | 4.5 | 4.5 |
| 37.00 | 1 | 3.8 | 4.5 | 9.1 |
| 40.00 | 1 | 3.8 | 4.5 | 13.6 |
| 44.00 | 1 | 3.8 | 4.5 | 18.2 |
| 57.00 | 2 | 7.7 | 9.1 | 27.3 |
| 67.00 | 1 | 3.8 | 4.5 | 31.8 |
| 74.00 | 2 | 7.7 | 9.1 | 40.9 |
| 77.00 | 4 | 15.4 | 18.2 | 59.1 |
| 80.00 | 5 | 19.2 | 22.7 | 81.8 |
| 84.00 | 1 | 3.8 | 4.5 | 86.4 |
| 87.00 | 1 | 3.8 | 4.5 | 90.9 |
| 90.00 | 2 | 7.7 | 9.1 | 100.0 |
| Total | 22 | 84.6 | 100.0 |  |
| Missing | System | 4 | 15.4 |  |  |
| Total | | 26 | 100.0 |  |  |

**Lampiran 14 : Dokumentasi Kegiatan**

**Pretest Kelas Kontrol**

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**Posttest Kelas Kontrol**

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**Proses pembelajaran**

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