

LAMPIRAN

2

(Data validitas instrument tes, uji realibilitas instrument tes, data nilai pretest dan posttest, statistik deskripsi pretest posttest, uji normalitas, uji mann whitney, uji n-gain)

Lampiran 2.1 Data Validitas Instrumen Tes

No.	Nama	Kelas	Nomor Soal										Total Skor
			X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	
1	ANM	4A	1	5	1	5	1	3	4	2	1	4	27
2	RAP	4A	3	5	2	5	0	2	3	1	3	1	25
3	HR	4A	2	5	2	5	2	1	2	3	3	1	26
4	MAZ	4A	3	4	0	5	0	5	2	1	2	3	25
5	VCAZ	4A	3	5	3	5	2	3	3	2	1	3	30
6	KAR	4A	2	5	3	5	5	3	4	5	2	2	36
7	BCB	4A	1	5	3	3	2	3	3	2	3	5	30
8	ANJ	4A	3	5	1	5	1	2	4	3	2	3	29
9	MKEA	4A	3	5	5	5	5	3	4	5	5	5	45
10	CA	4A	2	5	3	5	5	4	3	2	5	3	37
11	GZ	4A	3	5	3	5	5	3	2	4	2	3	35
12	VAH	4A	1	5	1	5	1	5	2	1	3	2	26
13	EAM	4A	1	5	3	5	2	4	3	2	3	2	30
14	KAS	4A	3	5	1	5	1	2	3	3	5	4	32
15	SAI	4A	1	5	1	2	1	2	3	1	3	1	20
16	AMAS	4A	1	5	3	5	1	5	2	3	2	3	30
17	ADS	4A	3	5	4	5	5	4	2	5	2	3	38
18	FW	4A	2	5	1	5	2	3	1	5	1	2	27
19	RW	4A	2	5	1	5	2	2	2	3	2	3	27
20	MANA	4A	3	5	3	5	1	4	2	2	2	3	30
21	AAA	4A	1	2	1	1	2	2	1	2	3	2	17
22	DPM	4A	4	2	1	5	5	3	2	3	2	3	30
23	LAM	4A	1	5	2	5	1	4	3	4	2	1	56
24	PWS	4A	1	5	0	5	0	4	0	3	3	1	22
25	NUA	4A	2	5	2	5	3	3	4	2	3	2	31
26	ARP	4A	1	5	1	5	1	3	3	4	3	2	28
27	SB	4B	1	3	1	5	5	4	2	3	5	2	31
28	MRA	4B	0	5	0	0	2	2	1	0	2	0	12
29	SA	4B	2	2	2	3	0	2	3	1	3	2	20
30	HA	4B	5	0	0	5	3	3	4	2	2	3	27
31	MFM	4B	2	3	1	3	3	1	2	1	1	3	20
32	ETAA	4B	1	5	3	5	2	3	2	3	3	3	30
33	ANS	4B	2	5	3	5	1	3	2	2	4	3	30
34	NQR	4B	3	5	1	5	3	2	3	5	3	3	33
35	MDAR	4B	1	5	3	5	5	3	4	3	3	5	37
36	KIR	4B	1	5	1	5	2	1	3	4	2	3	27
37	SJP	4B	5	5	3	5	3	5	2	3	4	3	38
38	SA	4B	1	5	2	5	3	5	2	2	3	2	30
39	NAT	4B	3	5	1	5	3	3	4	3	1	4	32
40	FRAH	4B	3	4	1	3	5	3	4	3	2	4	32
41	DRP	4B	3	3	1	5	3	3	3	4	2	2	29
42	RNS	4B	1	5	4	5	1	4	3	3	3	1	30
43	KNLA	4B	3	5	4	5	2	3	4	2	5	2	35
44	NTA	4B	1	1	1	5	1	3	2	1	5	1	21
45	RP	4B	1	5	3	5	2	3	2	3	3	3	30

46	MSM	4B	1	5	3	5	1	3	2	5	4	1	30
47	ADZ	4B	1	5	1	1	2	2	3	1	2	2	20
48	CFY	4B	2	5	3	3	2	2	3	3	2	2	27
49	DNN	4B	4	5	1	5	1	4	3	2	4	1	30
50	MZGM	4B	3	1	3	5	2	4	2	3	2	2	27
51	BBP	4B	3	5	1	5	1	2	3	5	3	2	30
52	RSAF	4B	1	1	1	5	1	3	1	1	5	1	20
53	IH	4B	3	1	3	1	1	2	1	3	1	1	17

N = 53

rtabel = 0,2656

Correlations													
		X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	TOTAL	
X1	Pearson Correlation	1	-.205	.046	.254	.225	.048	.255	.197	-.088	.258	.254	
	Sig. (2-tailed)		.140	.743	.067	.106	.733	.065	.156	.532	.062	.067	
	N	53	53	53	53	53	53	53	53	53	53	53	
X2	Pearson Correlation	-.205	1	.251	.198	.002	.089	.229	.246	-.007	.178	.398**	
	Sig. (2-tailed)	.140		.070	.156	.991	.525	.099	.076	.960	.202	.003	
	N	53	53	53	53	53	53	53	53	53	53	53	
X3	Pearson Correlation	.046	.251	1	.184	.260	.218	.170	.295*	.192	.220	.494**	
	Sig. (2-tailed)	.743	.070		.188	.060	.117	.224	.032	.169	.113	.000	
	N	53	53	53	53	53	53	53	53	53	53	53	
X4	Pearson Correlation	.254	.198	.184	1	.086	.418**	.210	.402**	.234	.231	.580**	
	Sig. (2-tailed)	.067	.156	.188		.542	.002	.131	.003	.092	.095	.000	
	N	53	53	53	53	53	53	53	53	53	53	53	
X5	Pearson Correlation	.225	.002	.260	.086	1	.059	.263	.361**	.014	.445**	.433**	
	Sig. (2-tailed)	.106	.991	.060	.542		.674	.057	.008	.923	.001	.001	
	N	53	53	53	53	53	53	53	53	53	53	53	
X6	Pearson Correlation	.048	.089	.218	.418**	.059	1	-.127	-.010	.163	.043	.381**	
	Sig. (2-tailed)	.733	.525	.117	.002	.674		.365	.941	.243	.762	.005	
	N	53	53	53	53	53	53	53	53	53	53	53	
X7	Pearson Correlation	.255	.229	.170	.210	.263	-.127	1	.119	.000	.440**	.451**	
	Sig. (2-tailed)	.065	.099	.224	.131	.057	.365		.394	.998	.001	.001	
	N	53	53	53	53	53	53	53	53	53	53	53	
X8	Pearson Correlation	.197	.246	.295*	.402**	.361**	-.010	.119	1	-.081	.213	.571**	
	Sig. (2-tailed)	.156	.076	.032	.003	.008	.941	.394		.563	.126	.000	
	N	53	53	53	53	53	53	53	53	53	53	53	
X9	Pearson Correlation	-.088	-.007	.192	.234	.014	.163	.000	-.081	1	-.087	.171	
	Sig. (2-tailed)	.532	.960	.169	.092	.923	.243	.998	.563		.535	.220	
	N	53	53	53	53	53	53	53	53	53	53	53	
X10	Pearson Correlation	.258	.178	.220	.231	.445**	.043	.440**	.213	-.087	1	.406**	
	Sig. (2-tailed)	.062	.202	.113	.095	.001	.762	.001	.126	.535		.003	
	N	53	53	53	53	53	53	53	53	53	53	53	
TOTAL	Pearson Correlation	.254	.398**	.494**	.580**	.433**	.381**	.451**	.571**	.171	.406**	1	
	Sig. (2-tailed)	.067	.003	.000	.000	.001	.005	.001	.000	.220	.003		
	N	53	53	53	53	53	53	53	53	53	53	53	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Soal	r hitung SPSS	r tabel	Validitas 0,005
Butir1	0,254	0,2656	Tidak valid
Butir2	0,398	0,2656	Valid
Butir3	0,494	0,2656	Valid
Butir4	0,580	0,2656	Valid
Butir5	0,433	0,2656	Valid

Butir6	0,381	0,2656	Valid
Butir7	0,451	0,2656	Valid
Butir8	0,571	0,2656	Valid
Butir9	0,171	0,2656	Tidak valid
Butir10	0,406	0,2656	Valid

Lampiran 2.2 Uji Realibilitas Instrumen Tes

Dasar pengambilan keputusan dalam uji reliabilitas Cronbach alpha adalah instrument dapat dikatakan reliabel jika nilai Cronbach alpha $> 0,6$.

Case Processing Summary

		N	%
Cases	Valid	53	100.0
	Excluded ^a	0	.0
	Total	53	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.697	8

Lampiran 2.3 Data Nilai Pretest Kelas Eksperimen dan Kontrol

Kategori Skor

Interval Skor	Kategori
1-20	Tidak baik
21-40	Kurang
41-60	Cukup
61-80	Baik
81-100	Sangat baik

No	Nama	Kelas	Nomor Soal										Total Skor	Nilai Pretest (Eksperimen)
			X1	X2	X3	X4	X5	X6	X7	X8	X9	X10		
1	ANM	4A	1	5	1	5	1	3	4	2	1	4	27	54
2	RAP	4A	3	5	2	5	0	2	3	1	3	1	25	50
3	HR	4A	2	5	2	5	2	1	2	3	3	1	26	52
4	MAZ	4A	3	4	0	5	0	5	2	1	2	3	25	50
5	VCAZ	4A	3	5	3	5	2	3	3	2	1	3	30	60
6	KAR	4A	2	5	3	5	5	3	4	5	2	2	36	72
7	BCB	4A	1	5	3	3	2	3	3	2	3	5	30	60
8	ANJ	4A	3	5	1	5	1	2	4	3	2	3	29	58
9	MKEA	4A	3	5	5	5	5	3	4	5	5	5	45	90
10	CA	4A	2	5	3	5	5	4	3	2	5	3	37	74
11	GZ	4A	3	5	3	5	5	3	2	4	2	3	35	70
12	VAH	4A	1	5	1	5	1	5	2	1	3	2	26	52
13	EAM	4A	1	5	3	5	2	4	3	2	3	2	30	60
14	KAS	4A	3	5	1	5	1	2	3	3	5	4	32	64
15	SAI	4A	1	5	1	2	1	2	3	1	3	1	20	40
16	AMAS	4A	1	5	3	5	1	5	2	3	2	3	30	60
17	ADS	4A	3	5	4	5	5	4	2	5	2	3	38	76
18	FW	4A	2	5	1	5	2	3	1	5	1	2	27	54
19	RW	4A	2	5	1	5	2	2	2	3	2	3	27	54
20	MANA	4A	3	5	3	5	1	4	2	2	2	3	30	60
21	AAA	4A	1	2	1	1	2	2	1	2	3	2	17	34
22	DPM	4A	4	2	1	5	5	3	2	3	2	3	30	60
23	LAM	4A	1	5	2	5	1	4	3	4	2	1	56	56
24	PWS	4A	1	5	0	5	0	4	0	3	3	1	22	44
25	NUA	4A	2	5	2	5	3	3	4	2	3	2	31	62
26	ARP	4A	1	5	1	5	1	3	3	4	3	2	28	56
Total													1522	
Rata-Rata													58,53	

No	Nama	Kelas	Nomor Soal										Total Skor	Nilai Pretest (Kontrol)
			X1	X2	X3	X4	X5	X6	X7	X8	X9	X10		
1	SB	4B	1	3	1	5	5	4	2	3	5	2	31	62
2	MRA	4B	0	5	0	0	2	2	1	0	2	0	12	24

[illegible]

Lampiran 2.4 Data Nilai Posttest Kelas Eksperimen dan Kontrol

No	Nama	Kelas	Nomor Soal										Total Skor	Nilai Posttest (Eksperimen)
			X1	X2	X3	X4	X5	X6	X7	X8	X9	X10		
1	ANM	4A	5	4	2	3	5	5	3	4	3	5	39	78
2	RAP	4A	5	2	5	5	5	5	4	2	4	5	42	84
3	HR	4A	5	5	5	5	5	5	5	5	5	5	50	100
4	MAZ	4A	5	3	3	5	4	5	5	3	3	4	40	80
5	VCAZ	4A	5	5	4	5	5	5	4	5	4	5	47	94
6	KAR	4A	5	5	5	3	5	4	5	4	4	5	45	90
7	BCB	4A	5	3	2	3	5	4	4	4	3	5	38	76
8	ANJ	4A	2	3	5	3	5	3	5	5	4	5	40	80
9	MKEA	4A	5	5	5	5	5	5	5	5	5	5	50	100
10	CA	4A	5	5	5	3	5	4	5	4	5	4	45	90
11	GZ	4A	5	5	5	5	5	5	5	5	5	5	50	100
12	VAH	4A	5	5	3	3	5	3	5	4	4	3	40	80
13	EAM	4A	5	5	5	5	1	5	3	4	5	5	43	86
14	KAS	4A	5	5	2	3	3	3	5	2	4	3	35	70
15	SAI	4A	5	5	5	3	5	5	3	2	5	3	41	82
16	AMAS	4A	5	2	3	3	5	4	3	3	5	2	35	70
17	ADS	4A	5	5	5	3	5	5	3	5	4	5	45	90
18	FW	4A	5	5	4	5	5	4	5	5	5	5	48	96
19	RW	4A	5	3	5	3	5	3	4	5	3	4	40	80
20	MANA	4A	5	2	3	5	5	3	4	3	5	5	40	80
21	AAA	4A	4	2	3	2	1	2	3	1	2	1	31	62
22	DPM	4A	2	2	5	5	5	3	4	4	5	5	40	80
23	LAM	4A	5	3	5	2	3	3	5	5	5	4	40	80
24	PWS	4A	5	3	3	3	5	3	2	5	3	5	37	74
25	NUA	4A	5	5	5	5	5	5	5	5	5	5	50	100
26	ARP	4A	5	5	5	2	5	5	4	4	5	3	43	86
Total													2188	
Rata-Rata													84,15	

No	Nama	Kelas	Nomor Soal										Total Skor	Nilai Posttest (Kontrol)
			X1	X2	X3	X4	X5	X6	X7	X8	X9	X10		
1	SB	4B	5	1	5	2	5	2	5	3	3	4	35	70
2	MRA	4B	5	1	5	2	5	2	5	3	3	4	35	70
3	SA	4B	2	3	1	2	5	5	3	2	4	3	30	60
4	HA	4B	5	2	2	3	4	5	3	4	5	3	36	72
5	MFM	4B	5	2	5	1	5	3	5	4	2	5	37	74
6	ETAA	4B	5	3	2	1	5	3	3	2	3	3	30	60
7	ANS	4B	5	3	2	1	5	3	3	2	3	3	30	60
8	NQR	4B	5	3	3	3	2	5	5	2	4	5	37	74
9	MDAR	4B	5	5	5	3	5	5	4	5	4	4	45	90
10	KIR	4B	5	3	3	2	5	3	3	3	4	4	35	70

[illegible]

Lampiran 2.5 Statistik Deskripsi Pretest dan Posttest

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Pre-Test Eksperimen	26	56	34	90	58.54	11.601
Post-Test Eksperimen	26	38	62	100	84.15	10.150
Pre-Test Kontrol	27	52	24	76	55.19	12.469
Post-Test Kontrol	27	40	50	90	70.96	9.485
Valid N (listwise)	26					

Lampiran 2.6 Uji Normalitas

Case Processing Summary

		Valid		Cases Missing		Total	
Kelas		N	Percent	N	Percent	N	Percent
Pemahaman Konsep IPA	Pre-Test Eksperimen (DL berbantuan lingkungan sekitar)	26	100.0%	0	0.0%	26	100.0%
	Post-Test Eksperimen (DL berbantuan lingkungan sekitar)	26	100.0%	0	0.0%	26	100.0%
	Pre-Test Kontrol (Konvensional)	27	100.0%	0	0.0%	27	100.0%
	Post-Test Kontrol (Konvensional)	27	100.0%	0	0.0%	27	100.0%

Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
Kelas		Statistic	df	Sig.	Statistic	df	Sig.
Pemahaman Konsep IPA	Pre-Test Eksperimen (DL berbantuan lingkungan sekitar)	.181	26	.029	.956	26	.315
	Post-Test Eksperimen (DL berbantuan lingkungan sekitar)	.159	26	.090	.947	26	.193
	Pre-Test Kontrol (Konvensional)	.206	27	.005	.919	27	.037
	Post-Test Kontrol (Konvensional)	.126	27	.200 [*]	.965	27	.484

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Lampiran 2.7 Uji Mann Whitney

Ranks

	Kelas	N	Mean Rank	Sum of Ranks
Pemahaman Konsep IPA	Kelas Eksperimen (DL berbantuan lingkungan sekitar)	26	35.98	935.50
	Kelas Kontrol (Konvensional)	27	18.35	495.50
	Total	53		

Test Statistics^a

	Pemahaman Konsep IPA
Mann-Whitney U	117.500
Wilcoxon W	495.500
Z	-4.181
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Kelas

Lampiran 2.8 Uji N-Gain

No.	Nama Siswa	Pretest	Posttest	N-Gain (Eksperimen)
1	ANM	54	78	0,52173913
2	RAP	50	84	0,68
3	HR	52	100	1
4	MAZ	50	80	0,6
5	VCAZ	60	94	0,85
6	KAR	72	90	0,642857143
7	BCB	60	76	0,4
8	ANJ	58	80	0,523809524
9	MKEA	90	100	1
10	CA	74	90	0,615384615
11	GZ	70	100	1
12	VAH	52	80	0,583333333
13	EAM	60	86	0,65
14	KAS	64	70	0,166666667
15	SAI	40	82	0,7
16	AMAS	60	70	0,25
17	ADS	76	90	0,583333333
18	FW	54	96	0,913043478
19	RW	54	80	0,565217391
20	MANA	60	80	0,5
21	AAA	34	62	0,424242424
22	DPM	60	80	0,5
23	LAM	56	80	0,545454545
24	PWS	44	74	0,535714286
25	NUA	62	100	1
26	ARP	56	86	0,681818182
Rata-rata		58,53	84,15	0,617796 (Sedang)

No.	Nama Siswa	Pretest	Posttest	N-Gain (Kontrol)
1	SB	62	70	0,210526316
2	MRA	24	70	0,605263158
3	SA	40	60	0,333333333
4	HA	54	72	0,391304348
5	MFM	40	74	0,566666667
6	ETAA	60	60	0
7	ANS	60	60	0
8	NQR	66	74	0,235294118
9	MDAR	74	90	0,615384615
10	KIR	54	70	0,347826087
11	SJP	76	80	0,166666667
12	SA	60	90	0,75
13	NAT	64	76	0,333333333
14	FRAH	64	70	0,166666667

15	DRP	58	64	0,142857143
16	RNS	60	60	0
17	KNLA	70	76	0,2
18	NTA	42	80	0,655172414
19	RP	60	72	0,3
20	MSM	60	80	0,5
21	ADZ	40	50	0,166666667
22	CFY	54	66	0,260869565
23	DNN	60	70	0,25
24	MZGM	54	84	0,652173913
25	BBP	60	70	0,25
26	RSAF	40	68	0,466666667
27	IH	34	60	0,393939394
Rata-rata		55,18	70,96	0,352075 (Sedang)