

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter will explain the finding and discussion of the research. The finding present about what the researcher found during the study, based on instrument that are questionnaire and documentation. The items that will be presented are presentation of data, hypothesis, and discussion.

A. Presentation of the Data

To find out the answer of the research problem, researcher need to present of the data. There are two variable of this research, there are problem based learning and English achievement.

1. Problem Based Learning

Based on the explanation on the previous chapter in chapter III, the problem based online learning data are obtain by using questionnaire form. This data is collected as proven with construct validity that researcher measure by using SPSS 20 process and also the reability proven by SPSS 20. The validity and reability data of the students confidence as follow:

a. Result of the Questionnaire

The researcher use questionnaire as an instrument of this data. The data obtained from the questionnaire will be analyze by using the statistical method. The questionnaire consist of 15 question and 5 alternative answer namely,

always, sometimes, and never. Because the qanswer of the data is not numerical, so the researcher change it to be numerical from by giving the score in every altenative answer, it is called as rating score.¹

1. The score answer of (SS) is 5.
2. The score answer of (S) is 4.
3. The score answer of (N) is 3.
4. The score answer of (TS) is 2.
5. The score answer of (STM) is 1.

In this case the researcher makes the table of problem based online learning of the questionair. It can be seen in table 4.1

¹ Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktik*, P.195.

Table 4.1**Problem Based Online Learning score**

N O	Student Name	Nomor Butir Angket															Total Score
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	ADI IKMALUL	3	3	2	5	4	4	3	2	3	2	4	5	4	4	1	49
2	AHMAD IHSANUR	5	3	3	3	3	5	3	4	3	2	5	4	5	2	5	55
3	AHMAD MAULIDI	5	4	2	3	4	4	2	4	4	3	3	5	5	3	3	54
4	AHSANUL HAFIDZI	3	3	3	2	3	3	2	3	3	2	4	4	3	1	3	42
5	ALFI SAFITRI	4	3	2	4	5	4	4	2	3	2	5	5	4	2	1	50
6	ANDI MOHAMMAD I	4	3	3	5	3	3	5	2	2	5	3	3	4	3	5	53
7	ANNISA DWIYANTI	5	3	3	3	5	3	3	3	1	2	4	3	4	4	4	50
8	ARDAN RAMADHAN	3	4	4	4	3	3	2	2	3	3	5	4	3	3	2	48
9	DELA PUSPANDINI	4	4	2	2	5	5	3	4	3	2	4	3	4	3	4	52
10	DELYA RISMA PUTRI	4	3	4	4	5	4	3	5	3	4	4	5	3	4	3	58
11	DENY PERDANA ROSI	5	3	3	1	4	5	1	3	2	3	3	5	5	2	5	50
12	DION AGUSTIAS	4	4	2	2	3	4	4	5	3	3	5	5	4	3	3	54
13	ELIZA NUR P	3	3	5	5	5	3	5	5	4	3	4	4	5	3	5	62
14	FAHMIE WAHYUDA	5	4	2	2	4	4	3	4	1	2	4	5	5	3	4	52
15	FAUZAN ADHIM	1	3	3	3	5	4	3	3	1	3	3	5	5	3	4	46
16	HAFIDZ AZKIA	3	3	4	4	5	5	5	4	5	4	5	3	5	4	5	64

17	ISMIYATUN FITRIANA	5	4	3	3	5	3	3	2	3	3	5	5	5	3	5	57
18	LARAS RAHMADHANI	1	4	1	3	5	3	3	4	3	2	3	4	1	3	4	44
19	MOH LATIF	4	1	2	1	3	2	2	2	2	1	2	2	4	1	1	30
20	MOH. ARIF	3	1	1	1	5	3	2	1	4	1	4	5	3	4	3	41
21	MOH. HELMY F	4	3	2	4	5	3	4	3	5	5	4	4	4	3	5	58
22	MOH. KURNIAWAN J	4	4	2	3	4	4	3	3	3	2	5	2	3	3	4	49
23	MOH. SYAHRUL R	5	4	3	2	5	5	3	5	4	4	4	5	5	3	5	62
24	MOHAMMAD AFIS	3	2	5	3	3	2	5	1	2	3	4	1	3	4	5	46
25	MUHAMMAD RAFLY A	4	3	3	3	4	3	3	4	4	3	3	5	5	3	5	55
26	NADIFA AULIA S	4	3	2	3	2	4	3	3	5	3	3	3	3	3	3	47
27	NAJWA CAMELIA	3	3	1	1	4	4	2	3	2	2	4	4	5	3	4	45
28	NAUFAL APRILIYAN	3	4	3	2	4	4	3	3	5	3	4	3	5	3	3	52
29	PUTRI AIDA LARASATI	4	3	3	3	4	4	3	3	2	2	3	4	4	4	5	51
30	REZA PRAYOGA	4	3	3	3	3	4	4	3	3	2	5	5	3	4	4	53
31	RYAN SETYA P	5	2	4	4	5	4	5	4	4	3	4	5	5	3	5	62
32	SYAH RIZAL M	4	4	4	3	5	3	3	3	3	4	4	3	4	3	4	54
33	TATANG FAJAR	4	3	2	3	4	4	2	4	3	2	3	3	5	4	5	51
Total		125	104	91	97	136	122	104	106	101	90	129	130	133	101	127	1696

b. Validity of Questionnaire

Validity is used to make sure that the data of the questionnaire is valid. The kind of validity which is used by the researcher is construct validity. The researcher used SPSS, It can make easily for the researcher to make sure that the data of the questionnaire is valid. The results are explained at the table below :

Table 4.2

Validity of Questionnaire Correlation

Correlations

	score A	score B	score C	score D	score E	score F	score G	score H	score I	score J	score K	score L	score M	score N	score O	total score
Pearson Correlation	1	.079	.068	-.094	-.074	.259	-.057	.183	.012	.097	.128	.213	.596**	-.100	.193	.366*
Sig. (2-tailed)		.662	.706	.604	.684	.145	.752	.308	.949	.593	.479	.235	.000	.581	.281	.036
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.079	1	-.030	.116	.105	.365*	-.067	.433*	.060	.296	.315	.155	.074	.035	.118	.404*
Sig. (2-tailed)	.662		.868	.519	.560	.037	.712	.012	.741	.094	.074	.388	.683	.848	.514	.020
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.068	-.030	1	.448*	.033	-.128	.475*	.103	.040	.459*	.198	-.181	.161	.134	.333	.470**
Sig. (2-tailed)	.706	.868		.009	.856	.477	.005	.567	.824	.007	.268	.315	.370	.457	.058	.006
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	-.094	.116	.448**	1	.133	-.090	.631*	.063	.204	.471*	.202	.023	-.055	.324	.060	.506**
Sig. (2-tailed)	.604	.519	.009		.461	.618	.000	.729	.256	.006	.259	.901	.760	.066	.739	.003
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	-.074	.105	.033	.133	1	.139	.115	.231	.086	.147	.103	.265	.138	.256	.212	.403*

Sig. (2-tailed)	.684	.560	.856	.461		.441	.525	.196	.632	.416	.569	.136	.444	.151	.235		.020
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.259	.365*	-.128	-.090	.139	1	-.093	.503*	.159	.050	.244	.333	.365*	.079	.169		.453**
Sig. (2-tailed)	.145	.037	.477	.618	.441		.608	.003	.376	.781	.171	.058	.037	.663	.347		.008
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	-.057	-.067	.475**	.631*	.115	-.093	1	.110	.208	.444*	.317	-.158	.026	.295	.308		.530**
Sig. (2-tailed)	.752	.712	.005	.000	.525	.608		.543	.245	.010	.072	.379	.886	.096	.082		.002
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.183	.433*	.103	.063	.231	.503*	.110	1	.222	.234	.023	.303	.287	.021	.324		.587**
Sig. (2-tailed)	.308	.012	.567	.729	.196	.003	.543		.215	.191	.900	.086	.105	.907	.066		.000
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.012	.060	.040	.204	.086	.159	.208	.222	1	.331	.180	.106	.141	.067	.029		.423*

Sig. (2-tailed)	.949	.741	.824	.256	.632	.376	.245	.215		.060	.316	.557	.435	.712	.872		.014
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.097	.296	.459**	.471*	.147	.050	.444*	.234	.331	1	.047	.013	.171	.144	.399*		.638**
Sig. (2-tailed)	.593	.094	.007	.006	.416	.781	.010	.191	.060		.795	.941	.340	.424	.021		.000
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.128	.315	.198	.202	.103	.244	.317	.023	.180	.047	1	.172	.043	.157	-.014		.412*
Sig. (2-tailed)	.479	.074	.268	.259	.569	.171	.072	.900	.316	.795		.339	.812	.384	.938		.017
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.213	.155	-.181	.023	.265	.333	-.158	.303	.106	.013	.172	1	.206	.004	-.076		.336
Sig. (2-tailed)	.235	.388	.315	.901	.136	.058	.379	.086	.557	.941	.339		.250	.981	.675		.056
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.596*	.074	.161	-.055	.138	.365*	.026	.287	.141	.171	.043	.206	1	-.083	.308		.495**

Sig. (2-tailed)	.000	.683	.370	.760	.444	.037	.886	.105	.435	.340	.812	.250		.646	.081		.003
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	-.100	.035	.134	.324	.256	.079	.295	.021	.067	.144	.157	.004	-.083	1	.263		.352*
Sig. (2-tailed)	.581	.848	.457	.066	.151	.663	.096	.907	.712	.424	.384	.981	.646		.140		.045
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.193	.118	.333	.060	.212	.169	.308	.324	.029	.399*	-.014	-.076	.308	.263	1		.549**
Sig. (2-tailed)	.281	.514	.058	.739	.235	.347	.082	.066	.872	.021	.938	.675	.081	.140			.001
N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Pearson Correlation	.366*	.404*	.470**	.506*	.403*	.453*	.530*	.587*	.423*	.638*	.412*	.336	.495**	.352*	.549*		1
Sig. (2-tailed)	.036	.020	.006	.003	.020	.008	.002	.000	.014	.000	.017	.056	.003	.045	.001		

N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
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** . Correlation is significant at the 0.01 level (2-tailed).

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

From this result after the researcher compare with r table. If r count = or > r table, it means the questionnaire is valid, and if r count < r table, it means the questionnaire is not valid and cannot be used as researcher data for the next steps there is testing reliability data.

Table 4.3

The result of the comparison of r count and r table

No	Question Item	Result			State
		r count	>/</=	r table	
1	1	0,366	>	0,3440	Valid
2	2	0,404	>	0,3440	Valid
3	3	0,470	>	0,3440	Valid
4	4	0,506	>	0,3440	Valid
5	5	0,403	>	0,3440	Valid
6	6	0,453	>	0,3440	Valid
7	7	0,530	>	0,3440	Valid
8	8	0,587	>	0,3440	Valid
9	9	0,423	>	0,3440	Valid
10	10	0,638	>	0,3440	Valid
11	11	0,412	>	0,3440	Valid
12	12	0,336	<	0,3440	Not Valid
13	131	0,495	>	0,3440	Valid
14	14	0,352	>	0,3440	Valid
15	15	0,549	>	0,3440	Valid

From the data we can see that are one of the questionnaire invalid. So the researcher use fourteen questionnaires, that are number 1,2,3,4,5,6,7,8,9,10,11,13,14, and 15.

c. Reability of Questionaire

Reability used to make sure that the obtained data is reliable or not. The researcher use Alpha Cronbach Technique by software SPSS 20 for windows. In this technique the instrument will reliable if the score of alpha Cronbach $> 0,6$.² Based on the result of counting from SPSS application below:

Table 4.4

Table of result aipha croncbach wich have cut item statistics

Item Statistics			
	Mean	Std. Deviation	N
score A	3.79	1.023	33
score B	3.15	.795	33
score C	2.76	1.032	33
score D	2.94	1.116	33
score E	4.12	.893	33
score F	3.70	.810	33
score G	3.15	1.034	33
score H	3.21	1.083	33
score I	3.06	1.116	33
score J	2.73	.977	33
score K	3.91	.805	33
score L	3.94	1.088	33
score M	4.03	.984	33
score N	3.06	.788	33
score O	3.85	1.253	33

² Sofiyan Siregar, *Metode Penelitian Kuantitatif*, P. 57.

Reliability Statistics	
Cronbach's Alpha	N of Items
.737	15

Based on the result, cronbach's alpha score is 0,737.

So the researcher can get conclusion that alpha score 0,737

> 0,6 it means that this instrument is reliable.

2. Student English Achievement

Based on chapter III, student English achievement is one of variable that the researcher used to corraelate with other variable.

The researcher will get score of this variable from the English teacher of SMK Negeri 3 Pamekasan.

Before the researcher testing the hypothesis, the researcher will analyze the data, after that the researcher can get the conclusion from this research. To count the result the researcher use SPSS application with product moment formula to analyze the data which includes 2 variable, namely the result of questionnaire of problem based online learning and score of student english achievement that given by the teacher.

Table 4.5

No	Student Name	Problem Based Online Learning	Student English Achievement
1	ADI IKMALUL	49	80
2	AHMAD IHSANUR	55	78
3	AHMAD MAULIDI	54	83
4	AHSANUL HAFIDZI	42	90

5	ALFI SAFITRI	50	89
6	ANDI MOHAMMAD I	53	78
7	ANNISA DWIYANTI	50	90
8	ARDAN RAMADHAN	48	85
9	DELA PUSPANDINI	52	85
10	DELYA RISMA PUTRI	58	78
11	DENY PERDANA ROSI	50	78
12	DION AGUSTIAS	54	70
13	ELIZA NUR P	62	78
14	FAHMIE WAHYUDA	52	78
15	FAUZAN ADHIM	46	78
16	HAFIDZ AZKIA	64	78
17	ISMIYATUN FITRIANA	57	78
18	LARAS RAHMADHANI	44	83
19	MOH LATIF	30	94
20	MOH. ARIF	41	80
21	MOH. HELMY F	58	83
22	MOH. KURNIAWAN J	49	83
23	MOH. SYAHRUL R	62	82
24	MOHAMMAD AFIS	46	78
25	MUHAMMAD RAFLY A	55	89
26	NADIFA AULIA S	47	78
27	NAJWA CAMELIA	45	78
28	NAUFAL APRILIYAN	52	80
29	PUTRI AIDA LARASATI	51	78
30	REZA PRAYOGA	53	89
31	RYAN SETYA P	62	78
32	SYAH RIZAL M	54	94
33	TATANG FAJAR	51	78
Total		1696	2715

Table 4.6

**Data of correlation of problem based online learning and student English
achievement**

No	Student Name	X	Y	X^2	Y^2	XY
1	ADI IKMALUL	49	80	2401	6400	3920
2	AHMAD IHSANUR	55	78	3025	6084	4290
3	AHMAD MAULIDI	54	83	2916	6889	4482
4	AHSANUL HAFIDZI	42	90	1764	8100	3780
5	ALFI SAFITRI	50	89	2500	7921	4450
6	ANDI MOHAMMAD I	53	78	2809	6084	4134
7	ANNISA DWIYANTI	50	90	2500	8100	4500
8	ARDAN RAMADHAN	48	85	2304	7225	4080
9	DELA PUSPANDINI	52	85	2704	7225	4420
10	DELYA RISMA PUTRI	58	78	3364	6084	4524
11	DENY PERDANA ROSI	50	78	2500	6084	3900
12	DION AGUSTIAS	54	70	2916	4900	3780
13	ELIZA NUR P	62	78	3844	6084	4836
14	FAHMIE WAHYUDA	52	78	2704	6084	4056
15	FAUZAN ADHIM	46	78	2116	6084	3588
16	HAFIDZ AZKIA	64	78	4096	6084	4992
17	ISMIYATUN FITRIANA	57	78	3249	6084	4446
18	LARAS RAHMADHANI	44	83	1936	6889	3652
19	MOH LATIF	30	94	900	8836	2820
20	MOH. ARIF	41	80	1681	6400	3280
21	MOH. HELMY F	58	83	3364	6889	4814
22	MOH. KURNIAWAN J	49	83	2401	6889	4067
23	MOH. SYAHRUL R	62	82	3844	6724	5084
24	MOHAMMAD AFIS	46	78	2116	6084	3588
25	MUHAMMAD RAFLY A	55	89	3025	7921	4895
26	NADIFA AULIA S	47	78	2209	6084	3666
27	NAJWA CAMELIA	45	78	2025	6084	3510
28	NAUFAL APRILIYAN	52	80	2704	6400	4160
29	PUTRI AIDA LARASATI	51	78	2601	6084	3978

30	REZA PRAYOGA	53	89	2809	7921	4717
31	RYAN SETYA P	62	78	3844	6084	4836
32	SYAH RIZAL M	54	94	2916	8836	5076
33	TATANG FAJAR	51	78	2601	6084	3978
Total		1696	2699	88688	221725	138299

Table 4.7

The result of person correlation product moment and statistical significance

Correlations

		problem based online learning	english achievement
problem based online learning	Pearson Correlation	1	-.338
	Sig. (2-tailed)		.054
	N	33	33
english achievement	Pearson Correlation	-.338	1
	Sig. (2-tailed)	.054	
	N	33	33

Based on the result above, the researcher know that the result of the statistical significant of two variable is 0,054.

B. Hypothesis Testing

From the result above, the researcher know that the value of significance of correlation between problem based online learning and student English achievement is 0,054. The test of these significant of correlation between two variable following the criteria :

1. If the result of this research $> 0,05$ it means not significance, alternative hypothesis is rejected and null hypothesis will be accepted.

2. If the result of this research $< 0,05$ it means significance, alternative hypothesis is accepted and null hypothesis will be rejected.

The researcher can conclude that value of this statistical significance is $0,054 > 0,05$. It means that the alternative hypothesis is rejected and null hypothesis is accepted. So the researcher can know that there is no correlation between problem online learning and student English achievement at 2nd grade student of SMK Negeri 3 Pamekasan.

C. Discussion

In this section, researcher will explain the result of finding to explanation about there is no correlation between problem based online learning and student English achievement.

Based on the data and the result of statistica counting process,the researcher know there is no correlation between that 2 variable. The researcher used SPSS to counting the person correlation product moment formula to get value statistical significance 0,054, and that value more than 0,05. The researcher know the degree of the correlation from the value of personcorrelation that is -0,338. It means that the interpretation of this research is sufficient correlation between problem based online learning and student English achievemet and the direction of the correlation is negative.