CHAPTER IV

RESEARCH FINDING

In this chapter the researcher describes the findings and the discussion which is covered during the research. The data obtained is expected to be able to answer the research questions mentioned in the first chapter. The descriptions of finding are students' preference learning style and students' critical reading achievement. The researcher presents them based on the data collected and the procedures presented in the chapter III.

A. Students' Learning Style Preference in Critical Reading Class

In the first research of this study the researcher has distributed learning style questionnaire to students. It was done on May 11st, 2015 and May 13rd, 2015 . In this section the researcher distributed learning style questionnaires to the 62 students (the students from class A and class B of critical reading class) as the sample of this research. It contains 30 questions. Students can answer by circling the options that they prefer. One question only has one answer. The format of answer as follow:

0 = Never

1 = Rarely

2 = Sometimes

3 = Often

4 = Always

The researcher gathers the data from questionnaire as follows:

Table 4.1

The Result of Students' Total Score from Questionnaire

No.	Name	Total score		
		Question A	Question B	Question C
1	AHR	30	25	17
2	BAAP	24	21	16
3	DAC	26	29	27
4	IN	22	14	16
5	KKN	33	23	28
6	MJ	20	21	22
7	MB	24	24	18
8	PKY	24	23	24
9	RH	28	27	26
10	RM	22	19	19
11	SAF	20	20	15
12	SI	27	32	28
13	WU	27	14	21
14	AMA	27	29	29
15	ECR	25	26	15
16	IPY	30	15	19
17	YA	31	25	22
18	MTK	21	19	20
19	BAR	22	18	23
20	DL	23	21	26
21	DAW	22	26	19
22	EMBP	25	21	24
23	EWA	25	24	28
24	HJ	23	23	24
25	MI	20	21	25
26	MN	25	24	19
27	RN	25	22	16
28	SA	32	23	24

29	YT	28	19	18
30	ZB	30	25	28
31	AFH	24	18	17
32	AN	22	25	28
33	AHM	32	24	23
34	HS	26	26	20
35	ALA	21	19	20
36	SM	32	26	30
37	WAH	27	24	26
38	DM	30	16	16
39	FAG	25	24	28
40	FNU	21	16	17
41	MD	26	26	25
42	IN	30	25	28
43	NAS	30	20	24
44	WH	25	24	28
45	ADA	23	26	23
46	AL	31	27	27
47	BRH	29	26	17
48	DAP	24	17	20
49	EAP	23	18	21
50	ENW	30	17	28
51	EKA	30	25	28
52	FYA	30	21	20
53	HK	28	28	23
54	IMA	21	19	21
55	KA	24	31	21
56	LM	31	26	32
57	LFS	22	19	23
58	MM	25	21	24
59	MF	24	23	26
60	RP	20	25	16
61	AM	29	23	24
62	MZ	20	13	11

N = 62

The researcher makes the percentage from 30 items that consist of 10 questions for visual learner categories, 10 questions for auditory learner categories and 10 questions for kinesthetic learner categories. The researcher categorizes students' learning style based on their score from each question. Visual learners get highest score in question A, Auditory learners get highest score in question B, and Kinesthetic learners get highest score in question C. But, from the data the researcher finds some students have the same high score in different learning style. It means that a student can prefer to have more than one learning style, it is also known as mix of learning style or multiple learning styles. Everyone has a mix of learning styles. Some people may find that they have a dominant style of learning, with far less use of the other styles. Others may find that they use different styles in different circumstances.[1] Because of the explanation above the researcher adds the total of respondent becomes 70 respondents (N = 70). In the table the researcher categorizes the type of learners and makes percentages.

The researcher breaks down the data into percentage to make it easy for the readers to understand the result of the observation. The formula to count the percentage as follows:

$$\mathrm{P} = \frac{F}{N}\, x\, 100\%$$

[1] "Overview of Learning Styles," accessed June 25, 2015, http://www.learning-styles-online.com/overview/.

P = Percentage

F = the number of each learning style

N = total number of students

Table 4.2

Visual Learners

NO	NAME
1	AHR
2	BAAP
3	IN
4	KKN
5	PKY
6	RH
7	RM
8	WU
9	IPY
10	YA
11	MTK
12	EMBP
13	MN
14	RN
15	SA
16	YT
17	ZB
18	AFH
19	AHM
20	ALA
21	SM
22	WAM
23	DM
24	FNU
25	IN
26	MB

27	SAF
28	HS
29	IN
30	NAS
31	MD
32	AL
33	BRH
34	DAP
35	EAP
36	ENW
37	FYA
38	HK
39	IMA
40	MM
41	AM
42	MZ

$$\mathbf{P} = \frac{F}{N} \times 100\%$$

$$= \frac{42}{70} \times 100\%$$

$$= 0,6 \times 100\%$$

$$= 60\%$$

Table 4.3

Auditory Learners

NO	NAME
1	DAC
2	MB
3	SAF
4	SI
5	IMA
6	ECR
7	DAW
8	HS
9	MD
10	ADA
11	HR
12	KA
13	RP

$$\mathbf{P} = \frac{F}{N} \times 100\%$$

$$= \frac{13}{70} \times 100\%$$

$$= 0, 19 \times 100\%$$

$$= 19\%$$

Table 4.4

Kinesthetic Learners

NO	NAME
1	MJ
2	PKY
3	HMA
4	BAR
5	DI
6	EWA
7	HJ
8	MI
9	AN
10	FAG
11	WH
12	IMA
13	LM
14	LFS
15	MF

$$\mathbf{P} = \frac{F}{N} \times 100\%$$

$$= \frac{15}{70} \times 100\%$$

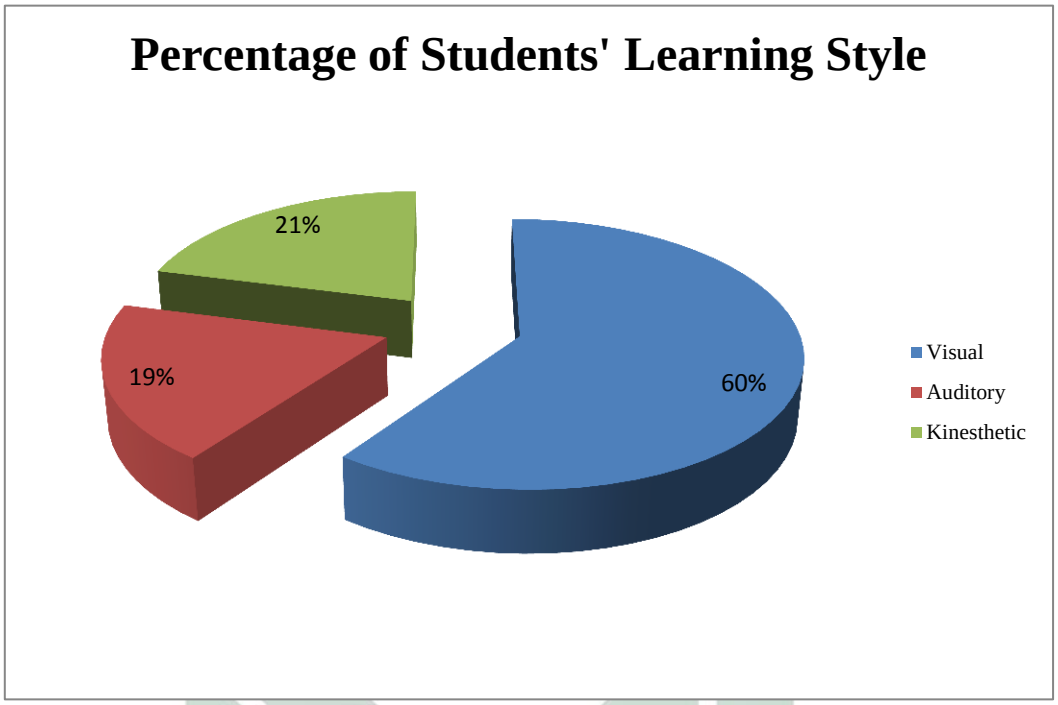
$$= 0, 21 \times 100\%$$

$$= 21\ \%$$

Chart 4.1

The Graph of Students' Learning Style of 4th Semester

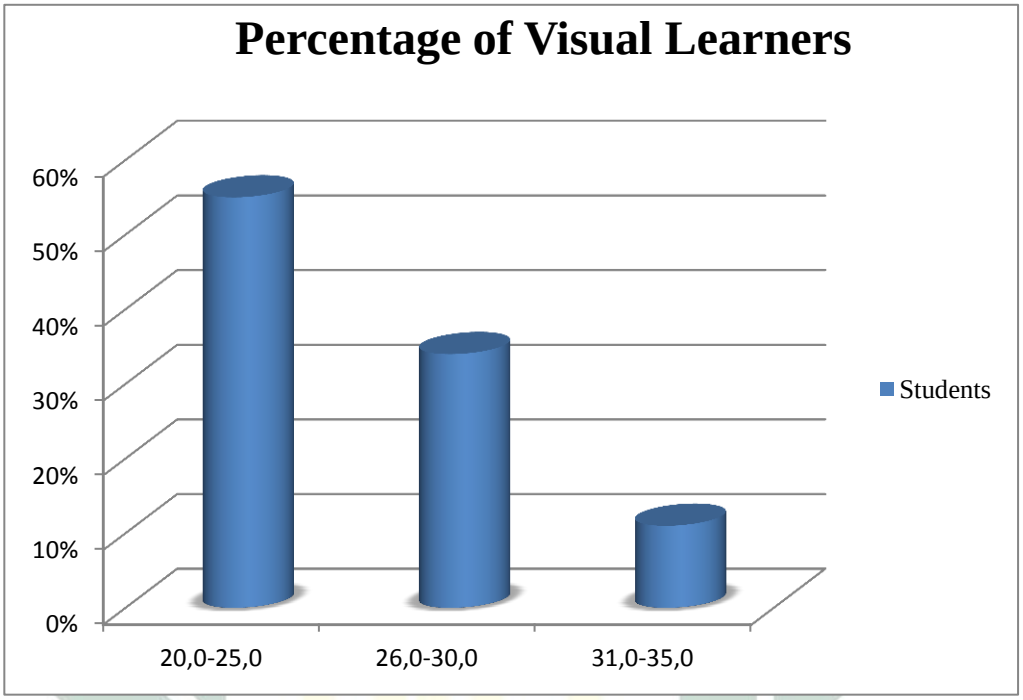
At Critical Reading Class



Based on the result above the researcher find the type of visual learners are 36 students (60%), auditory learners are 13 students (19%) and kinesthetic learners are 15 students (21%). It shows that visual learners are more dominant than auditory and kinesthetic learners in critical reading class. Yet, there are 14 students who have multiple learning styles.

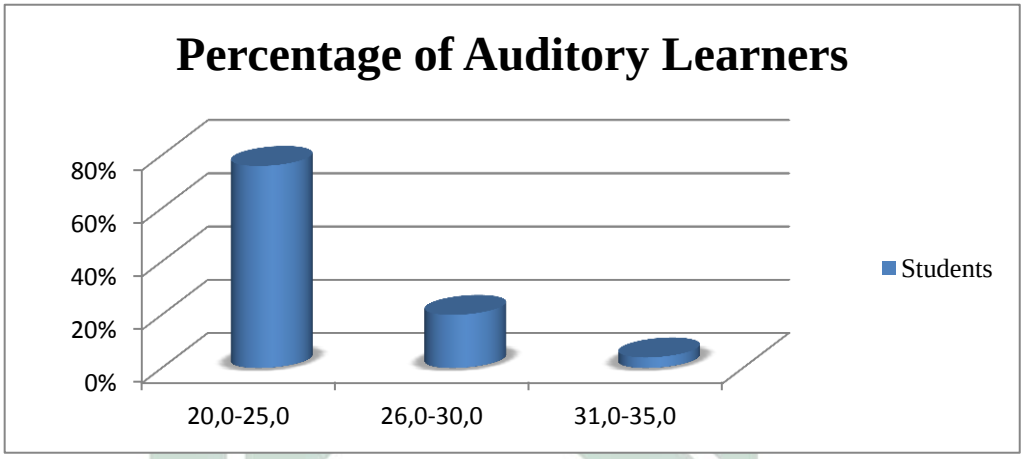
The preeminent of students for each learning style is shown in table above. For more detail about the score of students' preeminent in each learning style is shown in the following table.

Chart 4.2



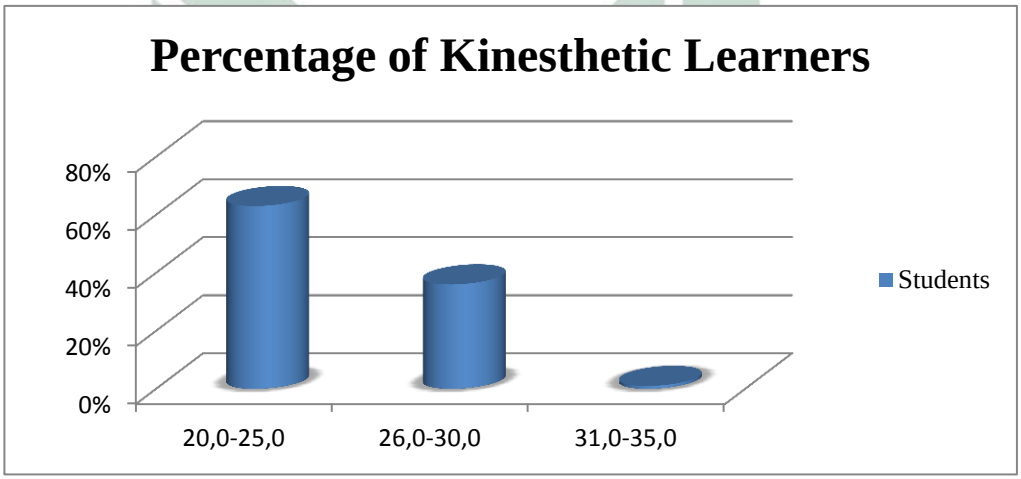
Based on the data obtained, the result the first question (visual preference) of questionnaire shows that among 62 students, there are 7 students who got highest score, their scores range from 31, 0 – 35, 0, there are 21 students who got the scores range from 26, 0 – 30, 0 and there are 34 students who got the scores range 20, 0 – 25, 0. This means that 55% students have tendencies in visual learning style another one with supreme visual learning style.

Chart 4.3



For auditory learning style, the result of the data shows that there are only 4 students who get highest score, 13 students get the scores range from 26, 0 – 30, 0 and there are 47 students who get the scores range 20, 0 – 25, 0.

Chart 4.4



For kinesthetic learning style, there are only 1 student who get preeminent or highest score in scores range from 31, 0 – 35, 0, there are 18 students who get the scores range from 26, 0 – 30, 0 and there are 43 students who get the scores range 20, 0 – 25, 0 this means the students majority have low kinesthetic learning style.

Note for the table 4.5 – table 4.7:

20, 0 – 25, 0 = Negligible (Low)

26, 0 – 30, 0 = Minor learning style preference (Strength)

31, 0 – 35, 0 = Major learning style preference (Very Strength)

The note above means that every student has learning style preference that reaches the higher point in an aspect of learning style than the other. In order to make the reader easy to read, the researcher classify the data into 3 groups including Negligible (Low), Minor learning style preference (Strength) and Major learning style preference (Very Strength).

In addition, there are some students who get more than one highest score in the sheet. It means that she/he has more than one majority learning style preference or it also calls as multiple learning styles.

B. Correlation between Students' Learning Style and Achievement in Critical Reading Class

The second variable of this research is students' achievement in critical reading class. This variable is collected from the students' critical reading score in 4th semester of 2014/2015 academic year. The score is taken from midterm examination. The students' critical reading achievement score is provided into the table below:

Table 4.5

Students' Critical Reading Score

No	Name	Total score	Categorization
1	AHR	4	Unacceptable D
2	BAAP	15	Superior A
3	DAC	10	Good B
4	IN	12	Good B
5	KKN	6	Below average C
6	MJ	8	Below average C
7	MB	12	Good B
8	PKY	11	Good B
9	RH	14	Superior A
10	RM	6	Below average C
11	SAF	10	Good B
12	SI	12	Good B
13	WU	10	Good B
14	AMA	9	Good B
15	ECR	10	Good B
16	IPY	12	Good B
17	YA	10	Good B
18	MTK	6	Below average C
19	BAR	6	Below average C
20	DL	6	Below average C

21	DAW	8	Below average C
22	EMBP	8	Below average C
23	EWA	8	Below average C
24	HJ	10	Good B
25	MI	6	Below average C
26	MN	10	Good B
27	RN	13	Superior A
28	SA	8	Below average C
29	YT	14	Superior A
30	ZB	15	Superior A
31	AFH	14	Superior A
32	AN	12	Good B
33	AHM	14	Superior A
34	HS	9	Good B
35	ALA	4	Unacceptable D
36	SM	6	Below average C
37	WAH	8	Below average C
38	DM	12	Good B
39	FAG	11	Good B
40	FNU	10	Good B
41	MD	12	Good B
42	IN	14	Superior A
43	NAS	6	Below average C
44	WH	9	Good B
45	ADA	6	Below average C
46	AL	10	Good B
47	BRH	9	Good B
48	DAP	9	Good B
49	EAP	4	Unacceptable D
50	ENW	12	Good B
51	EKA	15	Superior A
52	FYA	9	Good B
53	HK	10	Good B
54	IMA	8	Below average C
55	KA	9	Good B
56	LM	14	Superior A

57	LFS	13	Superior A
58	MM	10	Good B
59	MF	12	Good B
60	RP	10	Good B
61	AM	8	Below average C
62	MZ	11	Good B

Based on the table above the higher score of the students is 15 and the lowest score is 4. The categories of total score are:

Superior : 13 – 16 (A)

Good : 9 – 12 (B)

Below Average : 5 – 8 (C)

Unacceptable : 1 — 4 (D)

Based on the table above, among 62 students there are 3 students get the lowest score (4) of critical reading middle test. It makes them fail the examination because (4) is unacceptable.

The summary of critical reading score is presented by the following table:

Table 4.6

Students' Score Range of Critical Reading

No	Score range	Number of students
1	13-15 (Superior)	11
2	9-12 (Good)	31
3	5-8 (Below Average)	17
4	1-4 (Unacceptable)	3

The table above shows that there are 11 students who get superior predicate and the score is between 13-14 and 15-31students who get good predicate and the average score is 9 to 12, 17 students who get below average predicate and the score is between 6 and 8 and there are 3 students who unacceptable because their score are 4. After the data is collected, the researcher calculates the data using Pearson Product Moment Correlation to find the significant correlation between students' learning style and critical reading achievement. Based on the data analysis technique on chapter III, the researcher uses application SPSS 16.0 to calculate and to know the correlation between students' learning style and achievement in critical reading class. The result of computation is shown more detail by making correlation between each learning style and the score of critical reading.

The correlation is presented as below:

Table 4.7

The Computation of Correlation between Students' Visual Learning Style and Achievement in Critical Reading Class

		VISUAL	CRITIAL READING SCORE
VISUAL	Pearson Correlation	1	.211
	Sig. (2-tailed)		.100
	N	62	62
CRITIAL READING SCORE	Pearson Correlation	.211	1
	Sig. (2-tailed)	.100	
	N	62	62

The table above describes the correlation between visual learning style and students' achievement as Pearson Correlation = 0. 211 and Sig. (2-tailed) = 0. 100. It means that the variables are positively associated (it can be seen from the coefficient correlation) but there is a week correlation between two variables. According to the statistical theory that is mentioned in chapter III, the standard level of significant is 0. 05. The table above shows the value of Sig. is higher than 0. 05. Accordingly, this shows there is no significant correlation between visual learning style and students' critical reading achievement.

Table 4.8

The Computation of Correlation between Students' Auditory Learning Style and Achievement in Critical Reading Class

		AUDITORY	CRITICAL READING SCORE
AUDITORY	Pearson Correlation	1	.060
	Sig. (2-tailed)		.643
	N	62	62
CRITICAL READING SCORE	Pearson Correlation	.060	1
	Sig. (2-tailed)	.643	
	N	62	62

The correlation between students' auditory learning style and achievement in critical reading class describes as Pearson correlation = 0. 060 and Sig. (2-tailed) = 0. 643. The value of Sig. is higher than the standard level of significant (0.05). It assigns no significance correlation between students' auditory learning style and achievement in critical reading class. It also can be seen from the coefficient correlation that shows the variables are positively associated but there is a very weak relationship between two variables.

Table 4.9

The Computation of Correlations between Students' Kinesthetic Learning Style and Achievement in Critical Reading Class

		KINESTHETIC	CRITICAL READING SCORE
KINESTHETIC	Pearson Correlation	1	.024
	Sig. (2-tailed)		.853
	N	62	62
CRITICAL READING SCORE	Pearson Correlation	.024	1
	Sig. (2-tailed)	.853	
	N	62	62

The correlation between students' kinesthetic learning style and achievement in critical reading class describes as Pearson correlation = 0. 024 and Sig. (2-tailed) = 0. 853. The value of Sig. is higher than the standard level of significant (0.05). It presents no significance correlation between two variables students' kinesthetic learning style and achievement in critical reading class. It also can be seen from the coefficient correlation that shows the variables are positively associated but there is a very weak correlation between two variables.

Besides calculating each learning style, the researcher also tries to find overall result of correlation between students' learning style and achievement in critical reading class. The result of calculation is as follows:

Table 4.10

The Result of Correlation between Students' Learning Style and Achievement in Critical Reading Class

		VISUAL	AUDITORY	KINESTHETIC	CRITICAL READING SCORE
VISUAL	Pearson Correlation	1	.297*	.406**	.211
	Sig. (2-tailed)		.019	.001	.100
	N	62	62	62	62
AUDITORY	Pearson Correlation	.297*	1	.475**	.060
	Sig. (2-tailed)	.019		.000	.643
	N	62	62	62	62
KINESTHETIC	Pearson Correlation	.406**	.475**	1	.024
	Sig. (2-tailed)	.001	.000		.853
	N	62	62	62	62
CRITICAL READING SCORE	Pearson Correlation	.211	.060	.024	1
	Sig. (2-tailed)	.100	.643	.853	
	N	62	62	62	62

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

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

The analysis above suggests that the learning style research does not show any correlation with critical reading achievement. The finding of this research is presented according to research problem.

The findings of the research are:

1. The correlation between visual of learning style and students' achievement in critical reading class is not significant (Sign. = 0. 100) and Pearson correlation = 0. 211. It means that the variables are positively associated and there is a weak relationship between two variables. Therefore, the increase of students' visual learning style is not definitive in increasing students' achievement in critical reading class.
2. The correlation between students' auditory learning style and students' achievement in critical reading class is not significant (Sign. = 0. 643) and Pearson correlation = 0. 060. It means that the variables are positively associated and there is very weak relationship between two variables. Hence, the increase of students' auditory learning style is not definitive in increasing students' achievement in critical reading class.
3. The correlation between students' kinesthetic learning style and students' achievement in critical reading class is not significant (Sign. = 0. 853) and Pearson correlation = 0. 024. It means that the variables are positively associated and there is very weak relationship between two variables. Consequently the increase of students' kinesthetic learning style is not definitive in increasing students' achievement in critical reading class.

In addition, the researcher proves the result not only by using SPSS 16. 0 but also by using Ms. Excel (see Appendix 4) and all of the result are same.

C. Discussion

The researcher presents the discussion based on the findings, the review of related theory and analysis of the data to clarify the findings. The research focuses on the students' preference learning style (visual, auditory and kinesthetic) and the correlation between learning style and critical reading achievement of students in 4th semester of English teacher education department at Sunan Ampel State Islamic University Surabaya.

Preferences learning styles of students are as follows. There are 42 students who are visual learners (including 6 students who have multiple learning styles) (60%), auditory learners are 13 students (including 6 students who have multiple learning styles) (19%) and kinesthetic learners are 15 students (including 2 students who have multiple learning styles) (21%). The findings are similar to some extent to findings in other researches. For example, the research of Reid reveals that Chinese, Korean and Arab students have preference for multiple learning styles.[2] Thus, the results of this research confirm the above research findings.

[2] J. Reid, "The Learning Style Preferences of ESL Students" 21, no. 1 (March 1987): 87–111.

Based on the finding with the data questionnaire that the researcher obtained from the students to know their preference learning style shows that most of the students have minor learning style preference. It can be seen from their learning style score that is on low average, it is in the range under 30 for each learning style (visual, auditory, kinesthetic). In fact, the minor learning styles indicate areas where students can function well as a learner.

Critical reading class is one of the learning processes that prefer to visual learning style, in the previous research that investigated the relationship between reading comprehension and learning style preference by William, a significant correlation was found with regard to visual, auditory and kinesthetic learning style preferences. [3] Honestly, it does not to be in progress because as the finding shows that mostly there is no significance correlation between students' learning style and achievement in critical reading class., the correlation of learning style and critical reading achievement is weak in visual and very weak in auditory and kinesthetic.

The factor which affects weakly associated but positive correlation between students learning style and critical reading achievement is the teacher strategies. Actually the teacher uses the visual item in teaching learning such as in daily assignment, the teacher gives the students task to read a text then make a summary about what they have read and understood. In fact, the correlation

[3] Judy Williams, "Doctoral Dissertation: "Reading Comprehension, Learning Styles, and Seventh Grade Students" (Liberty University, 2010).

between visual learning style and critical reading achievement of students is good and higher than auditory and kinesthetic even though the correlation is weak. Moreover, the students also prefer to visual learning style. It is proved from the data obtained. The percentage shows that 60% of students are visual learners. It indicates that students have good absorbency in visual learning style.

Beside visual item, the teacher also gives the students auditory and kinesthetic item in the task. Such as doing observation through the text that is given to them, then making the conclusion about what they have observed. It should help the students to increase their achievement in critical reading class. Obviously, it does not make sense.

The finding result shows that the Ho (null hypothesis) of the research is accepted for learning style. Although the learning style and critical reading achievement are correlated, it is differentiated by high and low correlation calculation. This is shown by the table of calculation above. Moreover, it can be seen from the relation in each score. Automatically, it shows that Ha is rejected for the variables, Learning style and critical reading achievement. This means students' learning style has no significant correlation with students' achievement in critical reading class.

For this research, the theory of Kolb and Honey and Mumfrod who describes learning style as an individual preferred in habitual ways of processing

and transforming knowledge[4] does not totally give effect for students in processing and transforming what they have read and observed in critical reading activities. Learning style should be the cause of the students' increases score of the subject especially in critical reading class. As Alan states that learning style is habits, strategies, regular mental behaviors concerning learning, particularly deliberate educational learning that an individual displays.[5] Meanwhile, the theory above does not positive impact in analysing the data in the finding. Since the researcher only measures from the students preference learning style.

[4] D. A. Kolb, *Experiential Learning: Experience as a Source of Learning and Development*, 1984.
[5] Pritchard Alan, *Ways Of Learning Second Edition* (New York: Routledge, 2009), 54.