

## Chapter Four

### Findings and Discussions

This chapter provides the findings and the discussions of the data analysis. The findings are the results of the data collected by the researcher and analyzed using SPSS. This research also provides discussions about the findings of the study. This research reveals whether the findings of the study prove the hypothesis or not.

#### Findings

The researcher used descriptive statistics method to identify the condition of teacher leadership at EED of UMY and the condition of students' learning achievement at EED of UMY. The researcher used inferential statistics to identify the correlation between teacher leadership and students learning achievement. The researcher collected the data through questionnaire from 62 respondents and analyzed the data using SPSS to obtain the findings. The findings of this study are divided into three parts:

**The normality test.** Before analyzed the data, the researcher did the normality test. The normality test was used to acknowledge the normality of the data on each variable. In normality test, if the sig value is greater than 0.05 (sig value  $> 0.05$ ), it means that the data is normal. Based on the results of the research, the table shows that the significant value of this research was 0.088. It means that 0.088 is greater than 0.05 ( $0.088 > 0.05$ ), so that all of the research variables was normally distributed.

The results of the normality test are presented below:

**Table 7**  
**One-Sample Kolmogorov-Smirnov Test**

		Total
N		62
Normal Parameters <sup>a, b</sup>	Mean	61.44
	Std. Deviation	5.875
Most Extreme Differences	Absolute	.159
	Positive	.159
	Negative	-.097
Kolmogorov-Smirnov Z		1.249
Asymp. Sig. (2-tailed)		.088

a. Test distribution is Normal.

b. Calculated from data.

**Teacher Leadership at EED of UMY.**Inorder to analyze the data about teacher leadership, the researcher makes the range score based on the mean value.

The interval formulation is from Supranto (2000). The formula is presented below:

$$C = \frac{X_n - X_1}{k}$$

C = the range prediction

k = the number of class that research wants

X<sub>n</sub> = the maximum score of variable

X<sub>1</sub> = the minimum score of variable

Table 8	
The range score for teacher leadership	
Value	Category
3.01 – 4.00	Good (Teachers fulfill all of the requirements of teacher leadership)
2.01 – 3.00	Average (Teachers almost fulfill all of the requirements of teacher leadership)
1.00 – 2.00	Poor (Teachers cannot fulfill the requirements of teacher leadership)

Based on the data analysis using SPSS, the results showed that the mean score of the questionnaire items was 3.07. So based on the categories of teacher leadership, this score was included in “good” category. It means that teachers at EED of UMY already fulfill all of the requirements of teacher leadership.

The mean score of teacher leadership are presented below:

Table 9

Teacher Leadership

N	Valid	62
	Missing	0
Mean		3.0718
Median		3.0000
Mode		3.00
Std. Deviation		.29374
Minimum		2.50
Maximum		3.95

The total mean score of teacher leadership of each item in the questionnaire are presented in the table below:

Table 10

Descriptive statistics teacher leadership

	N	Mean	Maximum	Minimum	Std. Deviation
Q1	62	2.77	4	2	0.525
Q2	62	2.87	4	2	0.495
Q3	62	3.26	4	2	0.477
Q4	62	2.92	4	2	0.522
Q5	62	2.97	4	2	0.511
Q6	62	3.16	4	1	0.578
Q7	62	3.37	4	2	0.520
Q8	62	3.03	4	2	0.511
Q9	62	2.98	4	2	0.528
Q10	62	3.13	4	2	0.461
Q11	62	2.92	4	2	0.609
Q12	62	3.15	4	2	0.539
Q13	62	3.13	4	2	0.495
Q14	62	3.16	4	2	0.486
Q15	62	3.05	4	2	0.459
Q16	62	3.15	4	2	0.474
Q17	62	2.95	4	2	0.493
Q18	62	3.23	4	3	0.422
Q19	62	3.15	4	2	0.399
Q20	62	3.10	4	2	0.469
TOTAL	62	61.44	79	50	5.875

The category of mean score from every item in the questionnaire is presented below:

Table 11

Descriptive statistics for teacher leadership

	Mean	Category
Q1	2.77	Average
Q2	2.87	Average
Q3	3.26	Good
Q4	2.92	Average
Q5	2.97	Average
Q6	3.16	Good
Q7	3.37	Good
Q8	3.03	Good
Q9	2.98	Average
Q10	3.13	Good
Q11	2.92	Average
Q12	3.15	Good
Q13	3.13	Good
Q14	3.16	Good
Q15	3.05	Good
Q16	3.15	Good
Q17	2.95	Average
Q18	3.23	Good
Q19	3.15	Good
Q20	3.10	Good

After discussing the mean score, the researcher describes the frequencies table of the entire questionnaire items. Every table was followed by a short explanation about the frequencies.

Table 12					
<i>Statement 1</i>					
<i>Teachers understand of how students' learn</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	17	27.4	27.4	27.4
	Agree	42	67.7	67.7	95.2
	Strongly Agree	3	4.8	4.8	100.0
	Total	62	100.0	100.0	

Based on the table, 17 respondents (27.4%) from the total 62 respondents disagree if teachers at EED UMY understand about how their students' learning. On the other hand, 42 respondents (67.7%) agree that teachers at EED UMY understand about it. Additionally, there were also 3 respondents (4.8%) who strongly believe that teachers at EED UMY really understand about how their students' learning. Then, the mean score of statement one is 2.77 and it was included in average category. It means that teachers almost fulfill the requirements of teacher leadership which is understand about how students' learning.

Table 13					
<i>Statement 2</i>					
<i>Teachers are able to accommodate the variety of students' learning</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	12	19.4	19.4	19.4
	Agree	46	74.2	74.2	93.5

	Strongly Agree	4	6.5	6.5	100.0
	Total	62	100.0	100.0	

Based on the table 13, there were 46 respondents (74.2) from the total 62 respondents who agree that teachers at EED UMY can accommodate the variety of their students learn. Four respondents (6.5%) also strongly agree with that. On the other hand, there are 12 respondents (19.4%) who disagree with the statement which said that teachers can accommodate the variety of their students' learn. Then, the mean score of statement two is 2.87 and it was included in average category. It means that teachers almost fulfill the requirements of teacher leadership which is teachers are able to accommodate the variety of students' learning.

Table 14					
<i>Statement 3</i>					
<i>Teachers can facilitate a students'-centered classroom environment</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.6	1.6	1.6
	Agree	44	71.0	71.0	72.6
	Strongly Agree	17	27.4	27.4	100.0
	Total	62	100.0	100.0	

Table14 shows that 44 out of 62 respondents (71%) agree that in teaching and learning process, teachers at EED of UMY always do some activities like discussion, role play or game which shows the implementation of student-centered classroom activity. In addition, 17 respondents (27.4%) strongly agree with that statement but there is 1 respondent (1.6%) who disagree that teachers at EED

UMY already apply the student-centered activity in their teaching and learning process. Then, the mean score of statement three is 3.26 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which is teachers can facilitate a students'-centered classroom environment.

Table 15					
<i>Statement 4</i>					
<i>Collect and analyze students' data regularly to make instructional decisions</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	11	17.7	17.7	17.7
	Agree	45	72.6	72.6	90.3
	Strongly Agree	6	9.7	9.7	100.0
	Total	62	100.0	100.0	

Based on table, there were 6 respondents (9.7%) who strongly agree that teachers at EED UMY always collect and analyze their students' learning achievement before they make instructional decisions. 45 respondents (72.6%) from the total 62 respondents also agree with that statement. On the other hand, there were 11 respondents (17.7%) who disagree if teachers at EED UMY always collect and analyze the data regularly before they make instructional decisions. Then, the mean score of statement four is 2.92 and it was included in average category. It means that teachers almost fulfill the requirements of teacher leadership which is teachers collect and analyze students' data regularly to make instructional decisions.



Table16					
<i>Statement 5</i>					
<i>Teachers can accommodate students' individual learning need</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	9	14.5	14.5	14.5
	Agree	46	74.2	74.2	88.7
	Strongly Agree	7	11.3	11.3	100.0
	Total	62	100.0	100.0	

Table 16 shows that there were 9 respondents (14.5%) who disagree with the statement which said that teachers at EED UMY can make an adjustment to accommodate students' learning need. But, from the 62 respondents, there are 46 respondents (74.2%) and 7 respondents (11.3%) who agree and strongly agree with the statement which said that teacher at EED UMY accommodate students' individual need. Then, the mean score of statement five is 2.97 and it was included in average category. It means that teachers almost fulfill the requirements of teacher leadership which is teachers can accommodate students' individual learning need.

Table 17					
<i>Statement 6</i>					
<i>Teachers accommodate an interesting teaching and learning process and motivate students.</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	1.6	1.6	1.6
	Disagree	3	4.8	4.8	6.5
	Agree	43	69.4	69.4	75.8
	Strongly Agree	15	24.2	24.2	100.0
	Total	62	100.0	100.0	

Based on the table 17, from 62 respondents, there were 43 respondents (69.4%) who agreed and 15 respondents (24.2%) who strongly agreed with the statement that teachers at EED UMY can provide an interesting teaching and learning process. On the other hand, there are 3 respondents (4.8%) and 1 respondents (1.6%) who disagree and also strongly disagree with that statement. Then, the mean score of statement six is 3.16 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which teachers can accommodate an interesting teaching and learning process and teachers also can motivate their students.

Table 18					
<i>Statement 7</i>					
<i>Teachers engage with technology to support instruction, make connections and locate resource.</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.6	1.6	1.6
	Agree	37	59.7	59.7	61.3
	Strongly Agree	24	38.7	38.7	100.0
	Total	62	100.0	100.0	

Table 18 shows that from 62 respondents only 1 respondent (1.6%) who disagree with the statement which said that teachers at EED of UMY engage with technology to support instruction, make connections and also locate resource. Meanwhile, 37 respondents (59.7%) agree and 24 respondents strongly agree with the statement which said that teachers at EED UMY engage with technology in the teaching and learning process. Then, the mean score of statement seven is 3.37 and it was in good category. It means that teachers fulfill all of the requirements

of teacher leadership which is teachers at EED of UMY engage with technology to support instruction, make connections and locate resource.

Table 19					
<i>Statement 8</i>					
<i>Teachers uinderstand and apply current research on effective teaching practice</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	7	11.3	11.3	11.3
	Agree	46	74.2	74.2	85.5
	Strongly Agree	9	14.5	14.5	100.0
	Total	62	100.0	100.0	

Table 19 shows that there 46 respondents (74.2%) who agree if teacher at EED UMY can understand and apply current research on effective teaching practice. Then, there were also 9 respondents (14.5%) who strongly agree with that statement. While, there 7 respondents (11.3%) who disagree with the statement which said that teachers can understand and apply current research on effective teaching practice. Then, the mean score of statement eight is 3.03 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which is teachers understand and can apply current research on effective teaching practice.

Table 20					
<i>Statement 9</i>					
<i>Teachers employ a variety of strategies to support authentic learning</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	9	14.5	14.5	14.5
	Agree	45	72.6	72.6	87.1
	Strongly Agree	8	12.9	12.9	100.0
	Total	62	100.0	100.0	

Based on the table, there 45 respondents (72.6%) who agree that teachers at EED UMY can employ a lot of strategies to support teaching and learning process using authentic learning. Moreover, 8 respondents (12.9%) also strongly agree with that statement. On the other hand, there were 9 respondents (14.5%) who disagree with that statement. Then, the mean score of statement nine is 2.98 and it was included in average category. It means that teachers almost fulfill the requirements of teacher leadership which is teachers can employ a variety of strategies to support authentic learning.

Table 21					
<i>Statement 10</i>					
<i>Teachers employ a variety of strategies of assessment</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	4.8	4.8	4.8
	Agree	48	77.4	77.4	82.3
	Strongly Agree	11	17.7	17.7	100.0
	Total	62	100.0	100.0	

Table 21 shows that from 62 persons there are 48 respondents (77.4%) who agree and also 11 responses (17.7%) who also strongly agree with the statement which said that teachers at EED UMY use a variety of assessment for their students' learning achievements. Then, the mean score of statement ten is 3.13 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which is teachers can employ a variety of strategies of assessment.

Table 22					
<i>Statement 11</i>					
<i>Teachers support the other teachers to identify strengths and weaknesses in fostering students' learning</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	14	22.6	22.6	22.6
	Agree	39	62.9	62.9	85.5
	Strongly Agree	9	14.5	14.5	100.0
	Total	62	100.0	100.0	

Based on the table, there were 39 respondents (62.9%) who agree that teachers at EED UMY support each other when they identify the strengths and the weaknesses in improving students' learning. Then there were also 9 respondents (14.5%) who strongly agree with the statement. Meanwhile, there are 14 respondents (22.6%) who disagree with the statement which said that teachers at EED UMY can support each other in improving students' learning. Then, the mean score of statement eleven is 2.92 and it was included in average category. It means that teachers almost fulfill the requirements of teacher leadership which is teachers support the other teachers to identify the strengths and weaknesses in fostering students' learning.

Table 23					
<i>Statement 12</i>					
<i>Teachers demonstrate interpersonal effectiveness including empathy, warmth and humility that leads to effective collaboration</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	5	8.1	8.1	8.1
	Agree	43	69.4	69.4	77.4
	Strongly Agree	14	22.6	22.6	100.0
	Total	62	100.0	100.0	

Table 23 shows that 43 respondents (69.4%) and 14 respondents (22.6%) were agree and strongly agree with the statement. On the other hand, there were 5 respondents (8.1%) who disagree with the statement which said that teachers at EED UMY can demonstrate interpersonal effectiveness to make an effective collaboration. Then, the mean score of statement twelve is 3.15 and it was included in good category. It means that teachers almost fulfill the requirements of teacher leadership which is teachers demonstrate interpersonal effectiveness including empathy, warmth, and humility that leads to effective collaboration.

Table 24					
<i>Statement 13</i>					
<i>Teachers develop trusting and reciprocal relationship</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	6.5	6.5	6.5
	Agree	46	74.2	74.2	80.6
	Strongly Agree	12	19.4	19.4	100.0
	Total	62	100.0	100.0	

Based on the table 24, there were 4 respondents (6.5%) who disagree with the statements which said that teachers of EED of UMY can develop trusting and reciprocal relationship. Meanwhile, 46 respondents (72%) agree with the statement and 12 respondents (19.4) strongly agree that teachers at EED can develop trusting and reciprocal relationship with their students. Then, the mean score of statement thirteen is 3.13 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which is teachers can develop trusting and reciprocal relationship with the other teachers and their students.

Table 25					
<i>Statement 14</i>					
<i>Teachers collect, analyze and use data to support improvement of teacher practice</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	4.8	4.8	4.8
	Agree	46	74.2	74.2	79.0
	Strongly Agree	13	21.0	21.0	100.0
	Total	62	100.0	100.0	

Based on the table, there were 13 respondents (21%) who agree with the statement which said that teachers at EED UMY always collect, analyze and use data to support improvement of teaching practice and 46 respondents (64.2%) also agree with that statement. Even though, there are a lot of respondent who agree with the statement but there were 3 respondents (4.8%) who disagree with it. Then, the mean score of statement fourteen is 3.16 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which is teachers can collect, analyze, and use data to support improvement of teacher practice.

Table 26					
<i>Statement 15</i>					
<i>Teachers incorporate coaching models that emphasize inquiry to guide teachers in improving both their practice and students' outcome</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	5	8.1	8.1	8.1
	Agree	49	79.0	79.0	87.1
	Strongly Agree	8	12.9	12.9	100.0
	Total	62	100.0	100.0	

Based on the table, there were 49 respondents (79%) from the total 62 respondents who agree with the statements which said that teachers at EED UMY can incorporate coaching models to guide teachers in improving both their practice and also students' outcome. Then, 8 respondents (12.9%) also strongly agree with it. Moreover, there were 5 respondents (8.1%) who disagree with the statement which said that teachers can incorporate coaching models to improve teaching practice and students' achievement. Then, the mean score of statement fifteen is 3.05 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which is teachers can incorporate coaching models that emphasize inquiry to guide teachers in improving both their practice and students' outcome.



Table 27					
Statement 16					
<i>Teachers can model and promote reflective practice</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	4.8	4.8	4.8
	Agree	47	75.8	75.8	80.6
	Strongly Agree	12	19.4	19.4	100.0
	Total	62	100.0	100.0	

Table 27 indicates that there were 75.8 % respondents who said that teachers at EED UMY can model and promote reflective practice and 19.4% respondents strongly agree with that statement. Moreover there are 4.8% respondents disagree with that statement. Then, the mean score of statement sixteen is 3.15 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which is teachers can model and promote reflective practice.

Table 28					
Statement 17					
Statement draw on research protocol and resources					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	9	14.5	14.5	14.5
	Agree	47	75.8	75.8	90.3
	Strongly Agree	6	9.7	9.7	100.0
	Total	62	100.0	100.0	

Based on the table, there were 75.8% respondents who agree that teachers at EED of UMY can draw on research protocol and resource and 9.7% respondents strongly agree with that statement. But, there were 14.5% respondents who disagree with that statement. Then, the mean score of statement seventeen is 2.95 and it was included in average category. It means that teachers almost fulfill the

requirements of teacher leadership which is teachers draw on research protocol and resources.

Table 29					
Statement 18					
<i>Teachers build and use norms when facilitating groups</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	48	77.4	77.4	77.4
	Strongly Agree	14	22.6	22.6	100.0
	Total	62	100.0	100.0	

The table shows that 77.4% respondents agree that teachers can build and use collaboration norms when facilitating groups and 22.6% respondents strongly agree with that statement. Then, the mean score of statement eighteen is 3.23 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which is teachers can build and use norms when facilitating groups.

Table 30					
Statement 19					
<i>Teachers can manage diverse view and resolve conflict in a classroom</i>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	1.6	1.6	1.6
	Agree	51	82.3	82.3	83.9
	Strongly Agree	10	16.1	16.1	16.1
	Total	62	100.0	100.0	100.0

Based on the table, the researcher indicates that 82.3% respondents agree that teachers at EED UMY can manage diverse view and resolve conflict. 16.1%

respondents also strongly agree with that statement, but there were 1.6% respondent who disagrees if teachers at EED UMY can manage diverse view and resolve conflict. Then, the mean score of statement nineteen is 3.15 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which is teachers can manage diverse view and resolve conflict in a classroom.

Table 31					
Statement 20					
Teachers share responsibility and leadership, serving as catalyst of others leadership and inspire students to get a good future					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	6.5	6.5	6.5
	Agree	48	77.4	77.4	83.9
	Strongly Agree	10	16.1	16.1	100.0
	Total	62	100.0	100.0	

The table shows that 77.4% respondents agree with the statement which are teachers at EED UMY can share responsibility and leadership to the others and 16.1% respondents strongly agree with that statement. On the other hand there were 6.5% respondents who disagree if teachers at EED UMY can share responsibility and leadership to the others. Then, the mean score of statement twenty is 3.10 and it was included in good category. It means that teachers fulfill all of the requirements of teacher leadership which is teachers at EED of UMY share responsibility and leadership, serving as catalyst of others leadership and inspire students to get a good future.

**Students' Achievement at EED of UMY.**In order to answer the research question about the condition of students' learning achievement at EED of UMY, the researcher find the mean score of the students' GPA and use the level of cumulative grade point average (GPA) at Universitas Muhammadiyah Yogyakarta based on "Keputusan Mendiknas Nomor 232/U/2000." below:

1. Excellent : 3.51 – above
2. Good : 2.76 – 3.50
3. Satisfactory : 2.00 – 2.75

Based on the analysis using SPSS, the researcher provides the students' learning achievement of EED' students' batch 2014 in the following table

Table 32

Students' Learning Achievement

	N	Minimum	Maximum	Mean
GPA	62	1.76	3.94	3.30
Valid N	62			

The majority of the students' EED UMY had a very good achievement. This is shown on the GPA of students who reached the maximum scores 3.94 and the minimum scores 1.76. Then the mean score of students' learning achievement was 3.30 and based on the level of cumulative grade point average (GPA) at Universitas Muhammadiyah Yogyakarta that score means that learning achievement EED of UMY of students' at EED of UMY batch 2014 was included in good level.

### The correlation between teacher leadership and students'

**achievement.** In order to identify the correlation between teacher leadership and students' learning achievement, the researcher analyzed the data using Pearson Product Moment Correlation. After the researcher analyzed the data using SPSS, the results of product moment correlation are presented below:

Table 33

The correlation between teacher leadership and students' learning achievement

		GPA	Teacher Leadership
GPA	Pearson Correlation	1	.379**
	Sig. (2-tailed)		.002
	N	62	62
Teacher Leadership	Pearson Correlation	.379**	1
	Sig. (2-tailed)	.002	
	N	62	62

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

In this research, Pearson Product Moment Correlation was used to check the relationship between teacher leadership and students' learning achievement. The variables correlate to each other when the significant value is less than 0.05 (sig value < 0.05). The results of this study show that the significance value was 0.002, it means that the hypothesis which state that there is a correlation between teacher leadership and students learning achievement at English Education Department (Ha) was accepted because of the significance value was 0.002 (sig value < 0.05). Meanwhile, there was a relationship in a moderate level based on the standard guideline of the association between two variables because of the pearson correlation value was 0.379. The results of the research also show a positive

correlation that was proven by the positive significant value. This positive correlation means that if the X variable increase, Y variable will also increase. Hence, when teacher leadership level increase, students' learning achievement level will also increase.

## **Discussions**

This study was conducted to find out the condition of teacher leadership at EED of UMY, the condition of students' learning achievement at EED of UMY and also to figure out the correlation between teacher leadership and students' learning achievement at EED of UMY. Based on the results of the data analysis, the discussions about the results are presented below.

**Teacher leadership at EED of UMY.** Based on the results of the descriptive statistics, the data from 62 respondents presented that teacher leadership at EED of UMY included in good level. Good level means that teachers at EED of UMY did all of the requirements of teacher leadership. It shows that teachers can apply all of leadership roles for teachers.

The results of the questionnaire show that the mean score of statement 13 which is teachers can develop trusting and reciprocal relationship was 3.13 and it was included in good level. It means that teachers at EED of UMY can fulfill all of the requirements of teacher leadership. This results also was in line with the theory from Timperley(2005) who said that teacher leadership is an essential part and one person cannot work alone to make changes needed to meet ever-changing campus and district needs. This means that teachers cannot work alone, teachers need to build a reciprocal relationship and collaborate with students and the other teachers to make changes in school and improve students' learning achievement.

Then, teachers at EED of UMY already did it like conduct a discussion with students and also the other teachers inside and outside the classroom.

Teachers at EED of UMY already do their role in teacher leadership. The researcher said that because the results of the questionnaire shows that 77.4% students' at EED of UMY agree that teachers can share responsibility and leadership and serve as catalyst of others' leadership to inspire their students to get a good future. Therefore, teachers at EED of UMY always look for a better way to make an improvement to increase their students' achievement. Moreover the mean score of this statement was also 3.10 and it was included in good category and it means that teachers at EED of UMY fulfill the requirements of teacher leadership. It is in line with the theory from Harisson and Killion (2007) who talk about the types of leadership roles for teachers, one of the roles that teachers should have is teachers should become a catalyst for change and they who take a catalyst role always have commitment for always make a continual improvement.

The condition of teacher leadership at EED of UMY was catagorized in good level because in every item in the questionnaire that used to measure the condition of teacher leadership, most students agree that their teachers already did their roles in teacher leadership and already have the characteristics as teachers in teacher leadership.

**Students' Learning Achievement.**Based on the academic guideline at UniversitasMuhammadiyah Yogyakarta, the condition of students' learning achievement at EED of UMY was categorized in good level. It is shown by the average of students' GPA which is 3.30.

Hsiang (2013) said that learning achievement is the results of students learning to see how far their ability during the process of teaching and learning in their study. Based on Syah (2008) students' achievement in learning process can be measured by score or point. Grade Point Average (GPA) can be an instrument to measure the condition of students' learning achievement. Universitas Muhammadiyah Yogyakarta also assesses students' achievement by GPA. In this study, the researcher also used GPA to measure the condition of students' achievement at EED of UMY.

The results of this research indicates that teachers become one of the factor that improve students' learning achievement, and they makes the condition of students' achievement at EED of UMY in a that level. This is in line with the theory from Wong (2014) who said that improving students' learning achievement is based on the teachers. It is about what teachers know and what teachers do in a classroom.

**The Correlation between Teacher Leadership and Students' Learning Achievements.** The result of the study shows that the significant value 0.002 (sig value  $< 0.05$ ) points out a correlation between teacher leadership and students' learning achievement. The pearson correlation value 0.379 shows that the relationship between teacher leadership and students' learning achievement at EED of UMY was in moderate level. The results of the research also show a positive correlation that was proven by the positive significant value. This positive correlation means that if the X variable increase, Y variable will also increase. Hence, when teacher leadership level increase, students' learning achievement level will also increase.



The results of the study prove that the statement from York-Barr and Dark (2004) who said that teacher leadership is a process when teachers influence the others in teaching and learning process to increase students' learning achievement was true. This statement was true because based on that statement from the expert, the purpose of teacher leadership was to increase students' learning achievement, then the results of the study shows that teacher leadership have a positive correlation with students' learning achievement. The results showed a positive correlation because "X" increases so does "Y" or "X" decreases so does "Y" and it means when teacher leadership at EED of UMY was good, it also can increase the students' learning achievements at EED of UMY.

Then, the condition of teacher leadership at EED of UMY was categorized in good level which means that teachers at EED of UMY did all of the requirements of teacher leadership. Teacher leadership in good level also means that teachers at EED of UMY have academic competencies and also leadership skill. The researcher indicates that it also becomes one factor that makes students' learning achievement at EED of UMY was good. It is in line with the theory from Teacher Leadership Exploratory Consortium (2011) which explained that leadership by teachers is essential to serving the students' need, school, and teaching profession. Teachers who have leadership skill serve the students' need in teaching and learning process so it helps their students to increase students' learning achievement.