

## The Effect of the Teacher Pedagogic Competency and Teacher Work Motivation of the Student Learning of the Outcomes

Desi Marheni<sup>1</sup>, Happy Fitria<sup>2</sup>, Yenny Puspita<sup>3</sup>

<sup>1</sup>SMA Negeri 1 Buay Sandang Aji

<sup>2,3</sup> PGRI University of Palembang

Email: [deasymarheny@gmail.com](mailto:deasymarheny@gmail.com)

### Abstract

The aim of this study is to describe the effect of teacher pedagogical competence and the motivation of teachers to work partially or collectively on the learning outcomes of SMA Negeri in the OKU Selatan District. This research is based on quantitative methods. The research population consisted of all State Senior High School teachers in South OKU Regency, with a total of 703 staff. The sample was collected using arandom sampling technique of 137 respondents. Data was analyzed using multiple linear regression, partial correlation and multiple correlation. This study led to the conclusion (1) that teaching competence has an effect on the student learning outcomes of SMA Negeri in OKU Selatan Regency. (2) The effect of teacher motivation on student learning outcomes of SMA Negeri in OKU Selatan Regency (3) is the effect of teacher pedagogical competence and motivation The work of teachers together on learning outcomes of SMA Negeri in OKU Selatan Regency means that learning outcomes SMA Negeri in OKU Selatan Regency can be improved by improving and increasing the quality of teaching competence and motivation of teaching staff.

**Keywords:** *Teacher Pedagogic Competence, Teacher Work Motivation, Student Learning Outcomes*

### INTRODUCTION

Education has an important role to play in shaping the quality of human resources in all fields, as explained in Law No. 20 of 2003 on the national education system Article 1 paragraph 1 that education is a conscious and planned effort to create an atmosphere of learning and learning, so that students can actively develop their potential To have the religious spiritual strength, self-control, personality, intelligence, noble character and skills that he, society, nation and state needs.

Pursuant to Law No. 20 of 2003 on the National Education System Article 3, National Education Functions for Capacity Development And to shape the character and character of the nation with dignity in order to educate the life of the nation, in order to develop the potential of the nation. Students who are to become faithful and devoted to God the Almighty have a noble character, healthy, knowledgeable, capable, creative, independent and democratic and responsible citizens.

[1]Argues that learning is a process that helps students learn well. The objectives of learning can be achieved through good learning activities. Achieving learning objectives can be seen from student learning outcomes. Consistent with the opinion of [2]: that learning outcomes are the achievement of learning objectives. According to Wasliman, there are several factors that influence both internal and external factors. [3]explains further that external factors include family factors, school factors and society, while internal factors include physical and psychological factors (intelligence, attention, interests, talents, motives and readiness). Based on the factors that affect learning, school factors, especially teachers, are inseparable factors in the teaching and learning process. In line with this, Wina Sanjaya in argues that the teacher is a very decisive component in the implementation of a learning

strategy. A qualified teacher is needed as a central point in the world of education. The teacher should have competence on the basis of The standards set in the world of education. Confirmed by [4]"it is the teacher who is at the forefront of creating quality human resources so that a teacher who has high qualifications, competence and dedication is needed in carrying out his professional duties"

[5]"points out that the competence of teachers to manage learning needs serious attention. This is because the teacher deals directly with students in the classroom through the teaching and learning process. Teachers' ability to manage learning plays an important role in providing students with experience. Motivation is another factor that influences learning. According to [6]"the term motivation comes from the word motive which can be interpreted as the strength in an individual that causes the individual to act [5]states that the motivation is closely linked to the objectives to be achieved In line with this opinion, a high level of motivation is needed to achieve learning objectives. On the basis of this description, there is a relationship between student learning outcomes and teacher competence and teacher motivation. According to Lefrancois, competence is the capacity to do something that is the result of the learning process. It can be concluded that competence is a complete unit that describes the potential, knowledge, skills and attitudes to be assessed, Related to certain professions with respect to parts that can be actualized and manifested in the form of actions or performances for the performance of certain professions. It is imperative to develop the potential of teachers, because their job is to educate students with knowledge and wisdom. The quality of a teacher must be a priority in an effort to develop an effective pattern of education. The quality of a teacher is characterized by a high level of intelligence, dexterity, dedication and loyalty, as well as sincerity in the advancement of education and the education of students. Teacher competence will lead him to become the professional teacher that the students want. In simple terms, professional teachers are teachers who have a strong motivation and ambition, teach subjects who are their expertise, have a high level of enthusiasm for their development, and are able to become the pioneers of change in society.

Motivation can be either basic or internal impulses or external incentives or gifts. As a problem in the classroom, motivation is the process of generating, maintaining and controlling interest. In general, this motivation is used to show the impulse that arises from the desire of students to take action. Motivation to learn is the result of an incentive for students to achieve the results of their learning activities. In this case, it is in the form of a desire to be able to study subjects properly and correctly and to be able to develop their potential and talents in such a way as to make them even more capable. Enthusiast in learning. The motivation for self-learning can be divided into two, namely the inner motivation and the extrinsic motivation. Intrinsic motivation is a motivation that arises from an urge or a desire on the part of students to take learning action. While extrinsic motivation is a motivation that arises from external encouragement, such as friends who are able to provide positive learning opportunities. According to Winataputra, learning outcomes are evidence of the success that students have achieved when each learning activity can lead to a distinct change. In this case, learning includes process skills, activity, motivation and learning achievement. Based on the results of the observations made, there were several obstacles faced by the teacher in the implementation of the learning process, namely the limitation of the teacher in maximizing the use of time, which caused the student learning process to be not optimal. The limitations of teachers to maximize the use of time indicate that teacher pedagogy still needs to be improved.

[5]argues that "good teachers must be able to design learning well, including in time management" and that teachers need to have good pedagogical competence in the 2013 curriculum.. Teacher motivation is still lacking in such a way that there are students who are less motivated to learn so that they use their time to play and do not have the courage to answer questions raised by the teacher. In addition, the learning methods used by the teacher didnt vary because they focus on methods of lecture and discussion. This can be seen from the teaching technique of the teacher using a blackboard and only lecture

techniques. Whereas in the 2013 curriculum, teachers are required to be creative in the use of learning technology.

Technology and media, which have been designed and adapted to the needs of students, can contribute to effective teaching. As far as the results of the observations are concerned, student learning outcomes are classified as high, but there are some student scores that do not reach the KKM of 75 with a percentage of 15%. This shows that student learning outcomes still need to be improved. This means that the subject matter is not properly absorbed because, when the teacher explains the material in the classroom at the same time, it requires students to practice it directly. Even though student learning outcomes are one indicator of the achievement of national education objectives. Educational objectives are said to be achieved when student learning outcomes experience development and improvement. One of the factors that has an impact on learning outcomes is that there is still a lack of motivation for the teacher to work so that there are students who are less motivated to learn so that they use their time to play and do not have the courage to answer questions put to them by the teacher. The lack of enthusiasm for learning among students is considered to have occurred because communication between teachers and students and students has not been well established, as demonstrated by students who do not wish to ask questions and discuss the assignment with other friends of the teacher. Communication is said to be good if students are able to receive messages from teachers and other students. In this case, the teacher, as a communicator, is the party responsible for effective communication in learning, so that the teacher, as a teacher, must have good communication skills in order to produce an effective learning process [7].

In order to ensure that the learning process is carried out effectively and efficiently and that the desired results are achieved, competent educators are needed to carry out the learning activities effectively and efficiently.. On the basis of the preliminary observations made by the author at SMA Negeri in the OKU Selatan district, the student learning outcomes did not meet the expectations, such as reduced student test scores.. [9] This is due to the lack of pedagogical competence of teachers and the lack of motivation of teachers to work in the performance of their duties, as can be seen from the small number of teachers who evaluate learning outcomes and student development in order to realize the different potentials of students.

Based on the background description, it can be said that teacher pedagogical competence, teacher motivation and student learning outcomes influence each other so that the authors are interested in conducting research on "The Effect of Teacher Pedagogical Competence and Teacher Work Motivation on Learning Outcomes of Public Senior High School Students in South OKU Regency"

## RESEARCH METHODOLOGY

The research method is one of the means or steps that must be taken to achieve the objectives of the study. According to [8] a method is a procedure or a way of finding out something that has systematic action. This study uses descriptive methods. research methods that describe and interpret objects in accordance with what they are [10] Research on the effect of teacher pedagogical competence and teacher motivation on student learning outcomes of the SMA Negeri in OKU Selatan Regency is a quantitative research firm. The experimental method that uses observation and questionnaires (questionnaire).

The study consisted of three variables in the form of two independent variables and one dependent variable.. Independent variables in this study are the pedagogical competence of the teacher and the motivation of the teacher to work. Although the dependent variable in this study is the learning outcomes of state high school students in the South OKU district.

## RESULTS AND DISCUSSION

### Data Description

**Table 1. Results of distributing teacher pedagogic competence questionnaires**

N	Minimum	Maximum	Mean		Std. Deviasi	Variance
Statistic	Statistic	Statistic	Statistic	Std.Error	Statistic	Statistic
137	59	100	91.30	0.665	7.786	60.623

Source: processed data, 2020

On the basis of the above table, it can be seen that the lowest score is 59 and the highest score is 100. The average score of respondents in terms of pedagogical competence is 91.30, while the standard error is 0.665 and the standard deviation is 7.786 with a variance of 60.623.

**Table 2. The results of the distribution of teacher work motivation questionnaires**

N	Minimum	Maximum	Mean		Std. Deviasi	Variance
Statistic	Statistic	Statistic	Statistic	Std.Error	Statistic	Statistic
137	64	104	89.77	0.654	7.660	58.680

Source: processed data, 2020

Based on the above table, it can be seen that the lowest score is 64 and the highest score is 104. The average score of respondents' responses to the teacher's work motivation is 89.77, while the standard error of 0.654 is 7.660 with a variance of 58.680.

**Table 2. Student learning outcomes**

N	Minimum	Maximum	Mean		Std. Deviasi	Variance
Statistic	Statistic	Statistic	Statistic	Std.Error	Statistic	Statistic
137	80	90	87.20	0.234	2.734	7.473

Source: processed data, 2020

Based on the table above, it can be seen that the lowest score is 80 and the highest score is 90. The average student learning score is 87.20, while the standard error is 0.234, the standard deviation is 2.734 with a variance of 7.

### Testing Data Analysis Requirements

#### Normality Test

The purpose of the normality test is to test whether or not the dependent variable and the independent variable have a normal distribution in the regression model. Normality testing is done in two ways, namely by using the Kolmogorov-Smirnov test and the Normal P-P plot graph test. The results of the normality test can be found in the table below.

**Table 3. Results of the Normality Test  
One-Sample Kolmogorov-Smirnov Test**

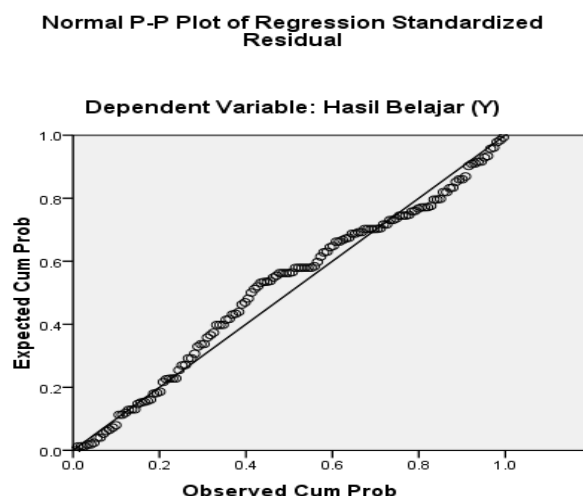
		Teacher Pedagogic Competencies	Teacher Work Motivation	Student learning outcomes
N		137	137	137
Normal Parameters <sup>a,b</sup>	Mean	91.30	89.77	87.20
	Std. Deviation	7.786	7.660	2.734
Absolute		.178	.147	.184
Positive		.154	.107	.153
Negative		-.178	-.147	-.184
Test Statistic		2.080	1.720	2.154
Asymp. Sig. (2-tailed)		.090 <sup>c,d</sup>	.085 <sup>c</sup>	.101 <sup>c</sup>
a. Test distribution is Normal.				
b. Calculated from data.				
c. Lilliefors Significance Correction.				
d. This is a lower bound of the true significance.				

The table above explains the Asymp. Sig (2-tailed) for the teacher's pedagogical competence variable was 0.090, the teacher's motivation variable was 0.085 and the student's learning outcome variable was 0.101

The basis for making decisions on the Kolmogorov Smirnov normality test is:

1. If the Asymp. Sig (2- tailed) > 0.05, then the conclusion is that the data are normally distributed
2. If the Asymp. Sig (2- tailed) < 0.05, the conclusion is that the data are not normally distributed

It can be seen from the table above. Normality testing when viewed from the Normal Chart Normal P-P Lot of Regression Standardized Residual as shown in Figure 1 shows that the data distribution is around the diagonal line and follows the direction I follows the diagonal line so that it can be interpreted that the data is normally distributed.. Regression analysis is therefore appropriate to be used to predict student learning outcomes based on the contribution of teacher pedagogical competence variables and the motivation of teacher work.



**Figure 1. Normal Chart Normal P-P Lot of Regression Standardized Residual**

Normality testing when viewed from the Normal P-P Regression Standardized Residual Graph as shown in the figure shows that the data distribution is around the diagonal line and follows the direction of the diagonal line so that it can be interpreted that the data is normally distributed. The dependent variable Y thus fulfills the normality assumption.

### Linearity Test

The linearity test is used to determine whether or not the data collected is linear. The linearity test of the independent variables and the dependent variable was performed using the one-way Anova in the SPSS Ver program 20.0 with a significant level of 5 percent ( $5-007 = 0.05$ ). Linearity test is used to determine whether the data obtained is linear or not. Testing the linearity of the independent variables with the dependent variable done with one-way Anova on the SPSS Ver program. 20.0 with a significant level of 5% ( $\alpha = 0.05$ ).

**Table 4. The Linearity Test**

					Sig.
Hasil Belajar (Y) * Kompetensi Pedagogik Guru (X1)	Between Groups	(Combined)			.052
		Linearity			.000
		Deviation from Linearity			.915
	Within Groups				
Total					
Hasil Belajar (Y) * Motivasi Kerja Guru (X2)	Between Groups	(Combined)			.005
		Linearity			.000
		Deviation from Linearity			.396
	Within Groups				
Total					

Based on the linearity test table above, the results show that the significance value on the line Deviation from linearity  $\geq \alpha$ , ( $\alpha = 0.05$ ), the relationship between teacher pedagogic competence variables and student learning outcomes and between teacher work motivation variables and student learning outcomes is linear. .

### Multicollinearity Test

The multicollinearity test aims to prove whether the regression model found a correlation between the independent variables (training and teaching experience). To detect



the presence or absence of multicollinearity problems in the regression model, it is done in the following way.

- If the tolerance value is  $> 0.10$  and the VIF value is  $< 10.0$ , it means that there is no multicollinearity.
- If the tolerance value is  $< 0.10$  and the VIF value  $> 10.0$ , it means that multicollinearity occurs.

**Table 5. The Multicollinearity Test**

Coefficients		Collinearity Statistics	
Model		Tolerance	VIF
1 Teacher Pedagogic Competence (X1)		.802	1.246
Teacher work motivation (X2)		.802	1.246

a. Dependent Variable: Learning outcomes

Based on Table 4.12, it can be seen that each variable has a tolerance value of  $> 0.10$  and a VIF value of  $< 10.00$ , so that it can be concluded that there is no multicollinearity between the independent variables.

### Hypothesis Test

Inferential statistical analysis is a multiple linear regression analysis that explains the output of the SPSS ver. 20.0 used to test the hypothesis. This analysis consists of a multiple linear regression analysis, a F (simultaneous) t (partial) test analysis and a coefficient of determination. Result of Partial Hypothesis Testing (t test)

**Table 6. Result of Partial Hypothesis Testing (t test)**  
**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t.	Sig.
		Std. Error	Beta		
(Constant)		2.849		24.140	.000
Teacher Pedagogic Competence (X1)	8.789	.030	.290	3.451	.001
Teacher work motivation (X2)	102	.030	.284	3.379	.001

Dependent Variable: Learning outcomes (Y)

The test results can be seen in the table above:

- The Effect of Teacher Pedagogic Competence on Student Learning Outcomes**  
Based on the table above, the t-count value of the training variable is 3.451 with a tsig value of 0.001 and the t-table value for  $n = 137$  is 1.656. That is, the value of tcount  $(3.451) > t$  table (1.656) and the value of tsig  $(0.000) < \alpha$  (0.05), meaning that  $H_0$  is rejected and  $H_a$  is accepted. Thus there is a significant effect of teacher pedagogical competence on student learning outcomes.
- The Effect of Teacher Work Motivation on Student Learning Outcomes**  
Based on the table above, the tcount of teacher work motivation variable is 3,379 with a tsig value. It is 0.001 and the t table value for  $n = 137$  is 1.656. That is, the value of tcount  $(3.379) > t$  table (1.656) and the value of tsig  $(0.001) < (0.05)$ , meaning that  $H_0$  is rejected

and  $H_a$  is accepted. Thus there is a significant significant teacher work motivation on student learning outcomes.

**Tabel 7. Multiple Linear Regression Test Results Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t.	Sig.
	B	Std. Error	Beta		
(Constant)	68.786	2.846		24.140	.000
Teacher Pedagogic Competence (X1)	.102	.030	.290	3.451	.001
Teacher work motivation (X2)	.101	.030	.284	3.379	.001

Dependent Variable: Learning outcomes (Y)

From the table above, it is obtained that the regression equation constant  $\alpha$  is 68.786 and the coefficient value of the independent variable  $b_1$  is 0.102 and  $b_2$  is 0.101, then the regression equation is obtained as follows

$$Y = 68,786 + 0,102 X_1 + 0,101 X_2$$

Based on this linear equation, it can be explained that:

1. The constant coefficient of 68.786 means that if the teacher's pedagogical competence (X1) and teacher work motivation (X2) are 0 or constant, then student learning outcomes (Y) are 68.786
2. The coefficient value of teacher pedagogic competence (X1) is 0.102, meaning that if the teacher's pedagogic competence (X1) increases by 1 unit score, student learning outcomes (Y) will increase by 0.102 assuming the teacher's work motivation coefficient is 0 or constant.
3. The coefficient of teacher work motivation (X2) is 0.101, meaning that if the teacher's work motivation (X2) increases by 1 unit score, then student learning outcomes (Y) will increase by 0.101 assuming the teacher's pedagogic competence coefficient is 0 or constant.

### Simultaneous Hypothesis Testing Results (together)

The simultaneous test using the F test aims to determine the effect of the independent variables (teacher pedagogical competence and teacher work motivation) together on the dependent variable (student learning outcomes). If the probability value (significant)  $> 0.05$ , then there is no influence between the pedagogic competence variables. There is no influence between teacher pedagogic competence variables (X1) and teacher work motivation (X2) on student learning outcomes (Y). If the probability value (significant)  $< 0.05$ , then there is an influence between the teacher pedagogical competence variable (X1) and teacher work motivation (X2) on student learning outcomes (Y).



**Table 8. Simultaneous Hypothesis Testing Results**  
**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	242.518	2	121.259	21.000	.000 <sup>b</sup>
	Residual	773.759	134	5.774		
	Total	1016.277	136			

a. Dependent Variable: Learning outcomes (Y)

b. Predictors: (Constant), Teacher Pedagogical Competence (X1), Teacher Work Motivation (X2)

Based on the output in the table above, it shows that the value of Fcount is 21,000 and F sig is 0,000 and the Ftable value for n = 137 is 3.06 (F table is attached). That is, the value (21,000) > F table (3.06) and the value of Fsig (0,000) < (0.05), meaning that Ho is rejected and Ha is accepted. It can be concluded that there is an effect of teacher pedagogical competence and teacher work motivation on student learning outcomes.α

### Determinant Coefficient

To determine the effect of teacher pedagogical competence variables and teacher work motivation on student learning outcomes variables simultaneously can be seen in the table below. Results of the determinant coefficient of teacher pedagogical competence (X1) and teacher work motivation (X2) on student learning outcomes (Y)

**Table 9. Results of The Determinant Coefficient**  
**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.489 <sup>a</sup>	.239	.227	2.403

a. Predictors: (Constant), Teacher Pedagogical Competence (X1), Teacher Work Motivation (X2)

The table above shows the magnitude of the value of R Square, namely 0, 239, thus the coefficient of determination is 23.9% so it can be concluded that the influence of the independent variables (teacher pedagogical competence and teacher work motivation) on the dependent variable (student learning outcomes) is 23.9% and the remaining 76.1% is influenced by other factors which are not research variables.

Based on the research that has been done, the results show that there is an effect of teacher pedagogical competence (X1) on student learning outcomes (Y). This result is in line with the hypothesis proposed that there is an effect of teacher pedagogical competence on student learning outcomes. The results of the study of 137 teachers studied showed that teacher pedagogical competence had a contribution to student learning outcomes, meaning that the training a teacher had participated in would help determine certain steps that could support the success of teacher work in achieving national education goals.

The results of this study are in line with Kurniawan, Chandra Agam (2019) entitled "the influence of Teacher Pedagogical Competence and Learning Motivation on Student Learning Outcomes, that there is a positive and significant relationship between teacher pedagogical competence and learning motivation on student learning outcomes of technical drawing shows 32% learning outcomes. Students' technical drawings are

influenced by teacher pedagogical competence and learning motivation while 68% students are influenced by other variables.

The results of this study are in line with previous research conducted by Anis Fauzi and Duriyat (2018) entitled the influence of teacher competence and work motivation on student learning outcomes showing that teacher competence, teacher work motivation and student learning outcomes of MTS SeKKM MTs Negeri 1 Seranf district are included in medium category, there is a significant effect of teacher competence and work motivation on student learning outcomes, namely 5.5%.

The results of this study are reinforced by Sardiman (2011: 75) that a student who has high integrity may fail due to lack of motivation. It was further explained that learning outcomes would be optimal if there was the right motivation based on the statement that teacher work motivation had an effect on student learning outcomes. The higher the teacher's work motivation, the better the learning outcomes obtained line with research conducted by Indri (2017), Science Partners explained that based on the results of calculations with the SPSS program, the first hypothesis was obtained which stated that there was an effect of training on the teaching performance of science teachers in SMP in Poso City. The results of the correlation analysis can be interpreted that there is a strong influence between training (X1 on teacher performance (Y) of 13.7%, while the remaining 86.3% is determined by other factors not included in this study.

Based on the relevant research above, it can be concluded that teacher pedagogical competence has a positive effect on student learning outcomes, this is because teacher pedagogical competence is one of the important things to be improved again in an effort to improve student learning outcomes of SMA Negeri in OKU Selatan Regency.

## CONCLUSION

Based on the results of the analysis, the pedagogical competence of the teacher has an impact on student learning outcomes. The following conclusions can be drawn on the basis of the results of the research and discussion. 1). Teacher pedagogical competence has a significant impact on student learning outcomes, which means that teachers are given the opportunity to develop and improve their skills through training, courses, seminars, workshops and so on. In order to do this, it is necessary to increase the quality of teachers. Teachers need to develop enthusiasm to increase knowledge so that they are not left behind.. 2) Teacher's work motivation has a significant impact on student learning outcomes, meaning that teacher motivation to work to support teaching and learning processes determines the level of success of student learning outcomes, so teachers with a good job motivation should be given appreciation or appreciation.. 3) There is a significant impact on teacher pedagogical competence and the motivation of teachers to work together on student learning outcomes. Teachers' pedagogical competence and the motivation of teachers to work can therefore have an impact on student learning outcomes.

## REFERENCES

- Susanto, A. 2016. *Teori Belajar dan Pembelajaran di Sekolah Dasar*. Jakarta: Kencana Prenada Media Group.
- Purwanto. 2016. *Evaluasi Hasil Belajar*. Yogyakarta: Pustaka Belajar.
- Slameto. 2010. *Belajar dan Faktor yang Mempengaruhinya*. Jakarta: Rineka Cipta
- Kunandar. 2014. *Guru Profesional Implementasi Kurikulum Tingkat Satuan Pendidikan (KTSP) dan Sukses Dalam Sertifikasi Guru*. Jakarta: Rajawali Pers.
- Mulyasa. 2013. *Pengembangan dan Implementasi Pemikiran Kurikulum*. Bandung: Rosdakarya
- Uno, Hamzah. B. 2016. *Teori Motivasi dan Pengukurannya*. Jakarta: PT. Bumi Aksara.
- Fahyuni. 2016. *Inovasi Model Pembelajaran Sesuai Kurikulum 2013*. Sidoharjo: Nizamia Learning Center.
- Handoko, 2014 T. Hani. *Management of Personnel and Human Resources, Edisiketiga, BPFE, Yogyakarta*

*Hey, Anwar, A. Uh. 2007. Early Education for Childhood. Bandung: Alfabeta Alfabeta*  
*Sugiyono. Sugiyono In 2013. Qualitative and R&D Quantitative Analysis Approaches.*  
*Alfabeta: Bandung*