



## The Effect of Self- Efficacy and Learning Innovation on Teacher Performance

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<b>ABSTRACT</b> The reason for this research is to find out and analyze: (1) the effect of Self-efficacy on teacher performance, and (2) the effect of learning innovation on teacher performance. The research subjects were the teachers of the Madrasah Aliyah Negeri Medan City with a total sample of 298 people taken by means of stratified proportional random sampling, the data were analyzed using path analysis after calculating the correlation of all research variables in the form of a matrix. The results of the analysis of the effect of exogenous variables on endogenous variables in each substructure obtained (1) Self-efficacy has a positive effect on teacher performance by 0,121 (2) learning innovation has a positive effect on teacher performance by 0,177. The results of the study illustrate that (1) there is a positive direct influence of Self-efficacy on teacher performance by 12,1 %, and (2) there is a direct positive influence of learning innovation on teacher performance of 17,7%.			
<b>Keywords:</b> <i>Learning, Innovation, Performance</i>			

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## INTRODUCTION

Educating the nation's life is one of the mandates of the 1945 Constitution and the noble ideals of the nation's founders as stated in paragraph 4. In essence, obtaining education is the right of every citizen, therefore the national education system must be able to guarantee equal distribution of education, quality improvement and relevance as well as efficiency. Based on the mapping results *Programme for International Study Assessment* (PISA) in 2000, 2003, 2006, 2009 and 2012 showed that Indonesia's educational performance tended to be stagnant (Mulyasa, 2015), and in 2018 the Human Development Index (HDI) assessment issued by The United Nations Development Program (UNDP) in 2019 showed that Indonesia was ranked 111 out of 189 countries

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(UNDP, 2019). The Ministry of National Education and the World Bank (2011) state that the education system in Indonesia has not produced graduates with high quality levels of knowledge and skills. Thus it can be said that currently the quality of education in Indonesia is still low. The low quality of education is inseparable from the potential role of qualified educators/teachers.

The Ministry of National Education and the World Bank (2011) state that the education system in Indonesia has not produced graduates with a high level of knowledge and skills. Thus, it can be concluded that currently the quality of education in Indonesia is still low. The low quality of education is inseparable from the potential role of qualified educators/teachers. The low performance of teachers in Madrasah is a very crucial issue and requires Madrasah to conduct planning and discussion in accordance with the dimensions of space and time. This demand has become a global trend that inevitably, like it or not, must be met in order to harmonize the performance of teachers in educational institutions, which accelerates external change by using various approaches.

The results of research conducted by Khodijah (2016) by looking at the performance of post-certification madrasah and Islamic religion teachers in South Sumatra, from indicators of planning, implementation, learning assessment, and professional development, the average is still below the minimum standard of performance. The findings show that there is no difference in performance after obtaining professional allowances through the teacher certification program, both between madrasah teachers and Islamic Religious Education teachers in public schools, between teachers who live in urban areas and teachers who live in rural areas.

One of the main factors that determine the quality of education is the teacher. The position of the teacher systematically determines the quality of education in Indonesia, therefore, improving the quality of teachers is very important and urgent to continue to be carried out in a planned and sustainable manner to boost the position of the quality of local education in order to be able to synergize the concepts of sustainable development that are applicable in dealing with global education world competition. Education has a major role in the effort to contribute to the development and progress of the nation. Education is the main key as the foundation for improving and preparing superior and competitive human resources.

Good teachers are those who constantly improve the quality of their knowledge, skills and insights about teacher training. When the science of teacher training is constantly changing, a good teacher will follow it, even if he takes part in the change. Performance can be interpreted as something that is bound and related between the teacher and his work. performance will depend on the right mix of the individual and the job. For this reason, a school will succeed well if it is supported by good teachers, namely from planning teacher procurement, managing teacher duties, to developing teacher careers, and ending with an evaluation of teacher assignments.

Indicators of teacher performance assessment as contained in the Regulation of the Minister of State Apparatus Empowerment Number 16 of 2009, can be described in detail as follows: (1) a person's ability to communicate the knowledge possessed is highly

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dependent on the mastery of the knowledge to be communicated, (2) the ability of the teacher can be seen from the method or process of preparing the program of learning activities carried out by the teacher, (3) the ability of the teacher to manage learning is important because it is directly related to student learning activities in the classroom, (4) the ability to evaluate learning.

Related to teacher performance, there are several factors that can influence and strengthen teacher performance variables, the first is self-efficacy. Baron and Byrne (Ghufron & Rini, 2010) define self-efficacy as a person evaluation of his ability or competence to perform a task, achieve a goal, and overcome obstacles. Konopaske and Matteson (2008) describe self-efficacy as a person's personal beliefs related to competence and performance. Alwisol (2012) describes the efficacy of describing self-assessment. Someone with high self-efficacy believes that they can do something to change events around them, whereas someone with low self-efficacy considers himself basically unable to do everything around him. To achieve success will have different impacts, depending on the achievement process (Alwisol, 2012).

For someone who is unable to assess his self-efficacy, actually from the beginning he has perceived his failure. In turn, they will experience difficulties in developing their potential because they lose opportunities to gain valuable experiences. The best assessment of the level of self-efficacy is an assessment that slightly exceeds one's abilities. This assessment will direct individuals to choose activities/tasks that are realistic and can encourage the development of their potential. Organizational success (Madrasah) is the success of every member of the organization who is able to empower himself consistently and effectively in carrying out his duties. Self-efficacy is one of the potentials that exist in human cognitive factors which are part of the determinants of human action in addition to the environment and internal drives.

Bandura (2013) found that a high level of self-efficacy has the ability to manage, perform, and solve problems related to these learning tasks. Whereas a low level of self-efficacy in students leads to the behavior of avoiding difficult assignments, complaining when given difficult assignments, being late in submitting assignments, and tending to give up easily in doing them. The same thing was also expressed by Gist, who showed evidence that feelings of self-efficacy play an important role in motivating workers to complete challenging work in relation to achieving certain goals (Ghufron & Rini, 2011).

Lely Suryani, Stefania Baptis Seto, and Maria Goretty D. Bantas (2020), states that there are several aspects that affect a person's self-efficacy including: (a) The nature of the task at hand, namely: A person will have high doubts about his abilities when faced with difficult and complex problems or tasks, and vice versa; (b) Status owned by a person, namely: Someone whose existence is calculated or has a high social status in their environment will also have a high level of self-efficacy. This is because a high social status will increase one's self-confidence. Vice versa, someone whose existence is excluded or has a low social status in their environment will have a low level of self-efficacy; (c) Information about one's own abilities, namely: Positive information about one's abilities and qualities will have an influence on increasing one's self-efficacy,

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conversely negative information about a person's abilities and qualities will be able to reduce and weaken the self-efficacy that exists in him.

To find out whether a person's self-efficacy is accurate or not, according to Bandura (1986) it is determined by four main sources of information, namely:

- 1) The performance results achieved,
- 2) Observing other people's performance experiences and as if experiencing it yourself,
- 3) Verbal belief and the influence of a number of social types in the process of forming capabilities, and,
- 4) The physiological state of some people's judgments about abilities, strengths, and susceptibility to dysfunction.

The four sources of self-efficacy information are reconstructed by Kreitner and Kinicki (2007) into a model of how self-efficacy can pave the way for success or failure, as shown in Figure I below.

## RESEARCH METHODOLOGY

The type used in this research is quantitative research with ex post facto research, namely the variables studied are not controlled and manipulated by the researcher, but the facts are revealed based on measuring symptoms that have been owned or testing what will happen. To analyze one variable with another variable path analysis is used. The research sample is part of the population taken as a data source, and can represent the entire population. Sampling in this study was done by means of stratified proportional random sampling to find out

Table 1. Distribution of Research Sample Proportion

No	Regency	Research Population	Number of Samples
1	Medan	215	54
2	Deli Serdang	45	11
3	Binjai	50	13
4	Langkat	105	27
5	Serdang Bedagai	21	5
6	Tebing Tinggi	14	4
7	Pematang Siantar	49	12
8	Simalungun	31	8
9	Karo	15	4
10	Dairi	16	4
11	Batubara	32	8
12	Asahan	44	11
13	Tanjung Balai	32	8
14	Labuhan Batu Utara	34	9
15	Labuhan Batu	37	9
16	Labuhan Batu Selatan	8	2
17	Padang Lawas Utara	18	5

18	Padang Lawas	56	14
19	Tapanuli Selatan	29	7
20	Padang Sidempuan	99	25
21	Mandailing Natal	135	34
22	Humbang Hasundutan	7	2
23	Tapanuli Utara	5	1
24	Tapanuli Tengah	46	12
25	Sibolga	22	6
26	Gunung Sitoli	12	3
	<b>Total</b>	<b>1177</b>	<b>298</b>

The purpose of this study was to examine and analyze the effect of self-efficacy on teacher performance, the effect of learning innovation on teacher performance, and the simultaneous effect of the influence of self-efficacy and learning innovation on teacher performance. This research was conducted with a framework as shown in Figure 3:

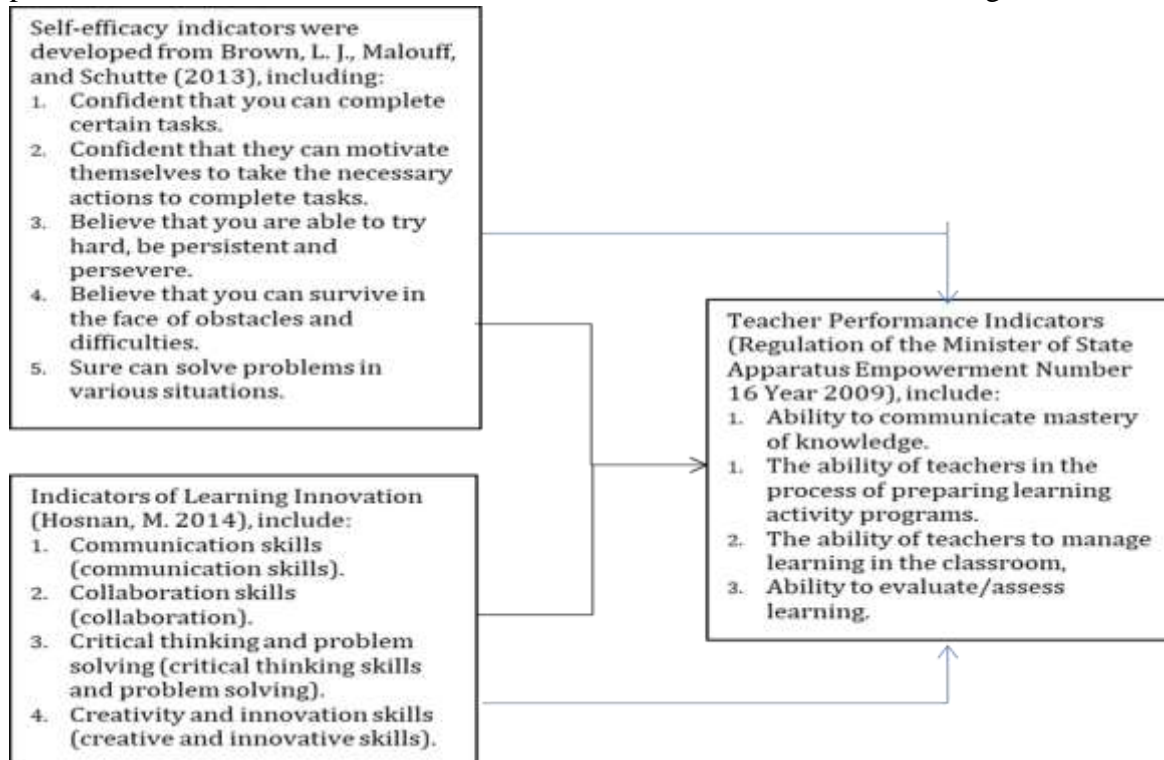


Figure 3. Relationship of Three Variables  
Source: Author (2022)

## RESULT AND DISCUSSION

### Normality Test Calculation

Testing the normality of research data aims to determine whether the symptoms encountered are a normal distribution or not. So the distribution of observational data is compared with theoretical data or data that is normally distributed ( $z = 3$ ). The normality test of the data was carried out using the Lilliefors test. To test the normality of the

research data, it was done by comparing the value of the largest Liliefors as  $L_{count}$  ( $L_{count}$ ) and the value of Liliefors table ( $L_{table}$ ) on a real level  $\alpha = 0,05$ . The proposed hypothesis is:

$H_0$ : The regression estimation error is not normally distributed

$H_a$ : The regression estimation error is normally distributed

The calculation of this normality test uses Table Z. To find out whether the data is normal for each research variable, it is carried out with the following provisions:

- If  $L$  obtained  $< L$  in the table with a significance level of 5%, the data distribution comes from a normally distributed population ( $L_{count} < L_{table}$ ) or accept  $H_a$ .
- If  $L$  obtained  $> L$  in the table with a significance level of 5%, the data distribution does not come from a normally distributed population ( $L_{count} > L_{table}$ ) or accept  $H_0$ .

Based on the calculation of the normality test, a summary of the results of the normality test for the estimated error of endogenous variable on exogenous variables is obtained as shown in Table 2 below:

Table 2. Summary of Normality Calculation of Liliefors.

No.	Variable	N	$L_{count}$	$L_{table}$	Conclusion
1	$X_3$ on $X_1$	298	0.033	0,052	Estimated error is normally distributed
2	$X_3$ on $X_2$	298	0.029	0,052	Estimated error is normally distributed

Based on the summary of the normality calculation of the Liliefors test data on the variables of Self-Efficacy ( $X_1$ ), Learning Innovation ( $X_2$ ), and Performance ( $X_3$ ), it can be concluded that:

- Normality Test for Variable Data  $X_3$  over  $X_1$ : indicates that the value of  $L_{count} < L_{table}$  (5%). The results of the statistical calculation of the Normality of the Liliefors Test obtained  $L_{count} = 0.033 < L_{table} = 0.052$ , then  $H_0$  is accepted at level = 0.05. This means that the data distribution comes from a normally distributed population.
- Normality Test of Variable Data  $X_3$  over  $X_2$ : indicates that the value of  $L_{count} < L_{table}$  (5%). The results of the statistical calculation of the Liliefors Test Normality obtained  $L_{count} = 0.029 < L_{table} = 0.052$ , then  $H_0$  is accepted at level = 0.05. This means that the data distribution comes from a normally distributed population.

Based on the summary of the calculation results, it is shown that the value of  $L_{count} < L_{table}$  (5%), thus it can be concluded that the overall distribution of the estimated error does not deviate from the normal distribution, meaning that the assumption of normality has been met.

The summary of the results of the linearity test and the significance of the regression equation for each pair of exogenous variables with endogenous variables through the calculation results of SPSS for Windiwo version 22 can be seen in Table 3 below:

Table 3. Summary of Linearity Test Results and SPSS . Significance Test

Regression	Linearity Test			Significance Test		
	$F_{count}$	$F_{table} (0,01)$	Results	$F_{count}$	$F_{table} (0,01)$	Results
Var ( $X_3$ ) on Var ( $X_1$ )	0.194 <sup>ns</sup>	3,43	Linear	257.769**	6,70	Significant



Var (X3) on Var (X2)	0.198 <sup>ns</sup>	3,32	Linear	327.403**	6,70	Significant
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Information:

X<sub>1</sub> = Self Efficacy

X<sub>2</sub> = Learning Innovation

X<sub>3</sub> = Teacher Performance

Based on the summary of the calculation results in Table 3, it can be seen that for the linearity test, namely the large Fh value, all values of significance (sig.) > 0.05, so it can be concluded that all pairs of exogenous variables with endogenous variables have a linear relationship, while the regression significance test is seen from the Fh value of all pairs of exogenous variables with endogenous variables having a significance value (sig.) < 0.05, so it can be stated that the regression coefficient is significant. So, the results of the analysis conclude that all forms of regression are linear and mean at a significance level of = 0.05.

Furthermore, to test the correlation matrix between the three variables from the path diagram, the hypothesized research variables were calculated using SPSS version 22 as follows:

Table 4. Correlation Matrix Between Variables

		X1 Self Efficacy	X2 Learning Innovation	X3 Performance
X1 Self Efficacy	Pearson Correlation	1	.692**	.682**
	Sig. (2-tailed)		.000	.000
	N	298	298	298
X2 Learning Innovation	Pearson Correlation	.692**	1	.725**
	Sig. (2-tailed)	.000		.000
	N	298	298	298
	Sig. (2-tailed)	.000	.000	.000
	N	298	298	298
X3 Performance	Pearson Correlation	.682**	.725**	1
	Sig. (2-tailed)	.000	.000	
	N	298	298	298

The significance test of the correlation coefficient of exogenous variables with endogenous variables was carried out through the t-test, where  $t_{\text{count}} = r_{xy} \sqrt{n-1} / \sqrt{1-r^2}$ , while  $t_{\text{table}}$  ( $\alpha = 0,05$ ;  $dk = n-2$ ) known based on the distribution table t.

To test the significance of the correlation coefficient, the following hypothesis is proposed:

H<sub>0</sub>: the correlation coefficient is not significant

H<sub>1</sub>: significant correlation coefficient

Test Criteria:

H<sub>0</sub> : accepted if  $t_{\text{count}} < t_{\text{table}}$

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Ho: rejected if  $t_{\text{count}} > t_{\text{table}}$ , on  $\alpha = 0,05$ ; dk = n-2

Table 5. Summary of simple correlation coefficient significance test

Correlation between variables	Notation ( $r_{xy}$ )	Correlation coefficient	$t_{\text{count}}$	$t_{\text{table}} (0,05)$	$t_{\text{table}} (0,01)$	Conclusion
Self efficacy (X1) with Performance (X3)	$r_{13}$	0,682	5,753**	1.971	2,345	Significant
Learning Innovation (X2) with Performance (X3)	$r_{23}$	0,725	6,483**	1.971	2,345	Significant

The strength of the relationship between self-efficacy variables ( $X_1$ ) and performance ( $X_3$ ) is indicated by the correlation coefficient ( $r_{13}$ ) of 0.682. Based on the significance test (significance) of the correlation coefficient with the t-test, it was obtained that  $t_{\text{count}}$  was 5.753 and was  $> t_{\text{table}}$  1.686 at  $= 0.05$  and 2.429 at  $= 0.01$ ; Thus the correlation coefficient ( $r_{13}$ ) = 0.796 is significant.

The strength of the relationship between the learning innovation variable ( $X_2$ ) and performance ( $X_3$ ) is indicated by the correlation coefficient ( $r_{25}$ ) of 0.725. Based on the significance test (significance) of the correlation coefficient with the t-test, it was obtained that  $t_{\text{count}}$  was 6.483 and it turned out to be  $> t_{\text{table}}$  1.971 at  $= 0.05$  and 2.345 at  $= 0.01$ ; Thus the correlation coefficient ( $r_{23}$ ) = 0.725 is significant.

This study describes 3 variables. Variables that affect exogenous consist of 2 variables, and variables that are influenced by endogenous variables consist of 1 variable, with the main endogenous variable being performance denoted by  $X_3$ . There are 2 (two) exogenous variables on the  $X_3$  variable, namely the self-efficacy variable denoted by  $X_1$ , and learning innovation denoted by  $X_2$ . The results of this study indicate that there is a match between the results of the study and the theories that are used as the basis for building the construct of this research. The results of the analysis of the data using the analysis unit of State Madrasah Aliyah teachers in Medan City are appropriate and support the form of influence path developed by Ivancevich, Konopaske and Matteson (2008) that self-efficacy and learning innovation have a direct effect on performance.

Furthermore, Ahmad Fauzan (2016) with his dissertation entitled the influence of principal leadership, self-efficacy, and professional commitment to the motivation and performance of MTsN Bandar Lampung teachers. The results of his research stated that teacher self-efficacy had a direct, positive and significant effect on teacher performance. The magnitude of the direct influence of teacher efficacy on teacher performance is 0.246. In addition, teacher self-efficacy has a positive and significant indirect effect on teacher performance through work motivation, the magnitude of the influence of teacher self-efficacy indirectly on teacher performance through work motivation is 0.15.

To see the suitability of the structure of the influence path, it is necessary to conduct discussions related to relevant theories, in order to provide reinforcement for researchers to arrive at the formulation of conclusions and research implications, it is necessary to carry out the following discussion.

Furthermore, the summary of the discussion of the research results can be described as follows:

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**The findings of the first research: The positive direct effect of self-efficacy ( $X_1$ ) on the Teachers performance of Aliyah State Madrasah ( $X_3$ )**

Based on the calculation results, the path coefficient value for self-efficacy ( $p_{31}$ ) = 0.121 and the correlation coefficient value = 0.682. After testing the significance of the path coefficient through the t test ( $t_{\text{count}} = 3.386 > t_{\text{table}} (0.01; 295) = 2.3267$ ), it turns out that the path of the effect of self-efficacy on performance is significant and positive. Thus, it has been tested through this research that self-efficacy has a direct positive effect on teacher performance. This shows that the increase in self-efficacy indicators results in an increase in performance indicators, including (1) learning planning; (2) the implementation of learning; (3) learning evaluation; and (4) enrichment of teaching materials.

The views of Cohen and Fink, Ivancevich et al., Adityawati, and Robbins & Judge above, are relevant to the test results of this study that self-efficacy has a direct positive effect on performance. So it can be said that the level of self-efficacy has a direct positive effect on the level of teacher performance. The proportion of self-efficacy ( $X_1$ ) affecting changes to teacher performance ( $X_3$ ) in any form is 0.093 or 9.3%, with a direct effect of 1.5% ( $DE = 0.015$ ). Thus, it can be concluded that there is a direct positive effect of self-efficacy on the teachers performance of State Madrasah Aliyah in Medan City.

**The second research finding: Learning innovation has a direct positive effect on the teachers performance of Aliyah State Madrasah in North Sumatra Province**

Learning innovation has a direct positive effect on the teachers performance of State Madrasah Aliyah in Medan City, meaning that if learning innovations are getting better, it will improve teacher performance as well. This is based on hypothesis testing with a large path coefficient  $p_{32} = 0,177$  and  $t = 2,435$  with significance level 0,016 (the hypothesis is accepted if the significance level of the value of  $t_{\text{count}} < 0,050$ ), so that the direct effect of learning innovation on the teachers performance of Aliyah State Madrasah in Medan City is 0,0313.

This test is supported by the results of Andina's research (2018) that by holding training, educators will be able to create learning innovations by mastering and applying various approaches, strategies, techniques, learning methods and learning media so that the learning process can be carried out properly and learning objectives achieved.

An indication of the influence between learning innovation and teachers performance of the State Madrasah Aliyah is the development of new ideas for innovation in learning devices and learning models. In addition, having the ability to carry out various teaching innovations and other relevant school administrative tasks, as well as being able to improve teacher performance to achieve the desired goals together.

**CONCLUSION**

Based on the results of the research and discussion of the results of the research, it can be concluded as follows:

Self efficacy has a direct positive effect and a direct proportional effect on performance. This means that the higher the self-efficacy, the higher the performance of

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State Aliyah Madrasah teachers in Medan City. Learning innovation has a direct positive effect, a relative direct effect and a proportional direct effect on performance. In other words, the higher the learning innovation, the higher the performance of State Aliyah Madrasah teachers in Medan City.

Thus, in general it can be concluded that the variation that occurs in the performance of State Madrasah Aliyah teachers in Medan City is directly influenced positively by variations in self-efficacy and learning innovation. The high and low performance of State Madrasah Aliyah teachers in is influenced by the high and low levels of self-efficacy and learning innovation. Improving self-efficacy of State Madrasah Aliyah teachers is an effort to increase self-confidence in carrying out their duties and obligations as teachers, namely being confident that they can complete assignments, confident of being able to motivate in completing assignments, confident of completing assignments, confident of being able to withstand challenges/temptations, and confident that they can solve the problem of the task.

Learning innovation is a new idea that is applied in the learning process so that it can achieve learning objectives well. The role of learning innovation is very important in efforts to solve the problems of education in Indonesia in general and State Madrasah Aliyah in Medan particular. This learning innovation can be carried out by educators, government, and other educational institutions. Teacher performance is one of the centers of attention in realizing quality educational institutions, the low performance of teachers has an impact on the learning process in Madrasahs. Teachers are the most important element in the ongoing learning process, as teachers have considerable duties and responsibilities in bringing about good changes in the world of education.

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