

The Influence of Teacher's Certification on Teacher's Performance

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The results of the analysis on the impact of teacher's certification affect the teacher performance. That can be shown that there is a positive relationship and significant result between the impact of teacher's certification, teacher's competence, work motivation, and work commitment with the teacher's performance. The result of relationship between the independent variables simultaneously toward the dependent variable. The impacts of certification, teacher's competence, work motivation, work commitment simultaneously have significant impact on the teacher's performance which is equal to $Y = -3450 + 0.822X1 + 0.642X2 + 0.606X3 + -0.021X4$.

Keywords: the impact of teacher' certification, teacher's competence, motivation, commitment, teacher's performance.

Background

The key factor of the nation competitiveness in the global era is science, technology and human resources (Trilling & Hood, 1999: 5-6; Wen, 2003: 21-94). The deterioration of the education quality in Indonesia is also stated by the United Educational Organization and Cultural Organization (UNESCO), the ranking of Indonesia in education in 2007 was 62 among 130 countries in the world. Educational development index (EDI) of Indonesia is 0.935, it is below Malaysia (0.945) and Brunei Darussalam (0.965). The low level of education in Indonesia is also reflected in the competitiveness at the international level. According to the World Economic Forum, 2007-2008, Indonesia's competitiveness was at level 54 of 131 countries. That is far away below the competitiveness ranking of other ASEAN countries such as Malaysia which ranks 21st and Singapore at 7th. The importance of teacher's role in determining the quality of education including vocational education, various efforts have been made such through education, training and apprenticeship. On the other hand, the efforts to improve the quality and performance of vocational education teachers still emerge several problems. The data from the PTK SIM of the Directorate General of PMPTK (Zamroni, 2007: 7) states that in terms of quantity,

the current number of high school teachers is 158,486 people or 7.4% of the total number of teachers in Indonesia of 2,139,951 people. In terms of quality, based on the RI Law No. 14 of 2005 concerning Teachers and Lecturers, and the Government of Indonesia Regulation No.19 of 2005 concerning National Standards of Education, it requires teachers to have academic qualifications, at least a Bachelor or Diploma IV (S1 / D-IV) and masters competencies as learning agents. Meanwhile, the condition of vocational school teachers is only 76.28% qualified in teaching, or there are still 23.72% of vocational school teachers unqualified in teaching.

Based on the background and problem identification above, it seems the main problem of senior high school is how to improve the school performance not optimally yet. One of the main factors which are able to affect the school performance is the teachers' performance.

The teacher performance can be influenced by external and internal factors. Related to the teacher's certification, it seems the teacher certification implementation touches more on the internal aspects (teacher's competence, motivation, and commitment).

Therefore, this research focuses on the teacher's performance which includes several aspects such as teacher's competence, work motivation and work commitment.

Literature Review

A. Description of Impact Evaluation

The International Initiative for Impact Evaluation (2008) states that Impact evaluation is "analyzes that measure the net change in outcomes for a particular group of people that can be attributed to a specific program using the best methodology available, feasible and appropriate to the evaluation question that is being investigated and to the specific context".

The other formulation is formulated by (Sudjana, 2006: 74-75) states that the effect of evaluation begins with learning the mission of the program and identifying the main results of the program that must to be achieved or the results of the program that can't be achieved.

Based on the statement, it can be concluded that the result of evaluation (outcome), the evaluator can dig up the some information through the benefits obtained by the participants during or after the program is implemented in the form of changes in the attitude and knowledge.

B. Teacher's Certification

Teacher certification is as a guarantee that the holder of certification has high professionalism in teaching. Related to the professionalism, according to Oxford Dictionary cited by Sagala (2009: 3), professionals are people who do things by getting payment, while others without payment. Based on the findings of the research results, it can be inferred that the teacher's certification program has had an effect to the teachers in carrying out their duties. The effects of teacher's certification can be reflected in attitude and behavior. The teachers are also proud of the recognition teaching profession existence, feel confidence, safety and calm, enthusiasm and motivation in carrying out tasks, enhancing competence and professionalism, and feeling of happiness because of better prosperity.

C. Teacher's Performance

The other opinion was pointed out by Brown & Lent (2005: 203-204). They noted that performance is a multiplication between competence and motivation. Competence refers to individual skills in doing certain tasks. Meanwhile motivation refers to an individual's desire to show his best performance. Individuals will do their best tasks if they have the competence and desire to conduct their tasks well. Based on this explanation above, it seems that competence and motivation play an important role in producing the best performance.

A good leader will be able to provide an excellent working atmosphere by the needs tasks to achieve their goals of this teachers and able to motivate teachers to works well and efficiently, so that eventually will be able to push towards improving teacher performance (Retnaningsih, 2018: 92). The optimal teacher performance is not only being driven by internal/individual's strengths (such as commitment, motivation, and competence), but is also supported by adequate external (situational) factors (such as conducive atmosphere of school's performance and adequate rewards).

a. Teacher's Competence

In the context of human resource development through education, teachers hold important roles and positions. The teacher is the most influence instrumental input in creating process and quality of education.

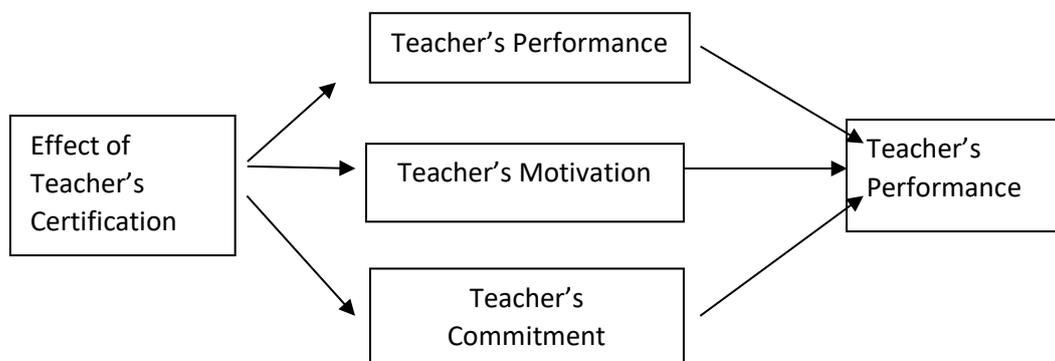
b. Teacher's Commitment

Robbins (2006: 94-95) assumed commitment as one of work attitudes, because it reflects a person's feelings (likes or dislikes) of the organization where he works. Commitment is an individual orientation towards the organization which includes loyalty, identification and involvement.

c. Teacher's Work Motivation

Giving motivation to the teachers and arising motivation from himself to work while getting achievement are able to improve job satisfaction. It also can achieve maximal performance and support the purpose of organization.

D. Theoretical Framework



Based on the display above can be explained that this research uses mixed Method research by using an approach of Sequential explanatory design.

Methodology

The research evaluation of the effect of senior high school teacher's certification towards teacher's performance is a research of evaluation using Qualitative-quantitative method (Mixed Methods).

The research design used was the Exploratory Sequential Design. This method is divided into two phases, the first phase is the qualitative phase in which the first step is to make the instrument with data collection. The data collected is qualitative data in the form of coding and themes. After that, the researchers carried out the quantitative method which is usually the development of instruments in the form of numbers where the data is tested with SPSS. This research was carried out at the State Senior High School of Klaten Mathematic Major which included three schools namely, State Senior High School 1, State Senior. Sample and Population, The use of qualitative methods, research subjects were selected from people who had the capacity as "key informants" of research, namely; school supervisors, principals, teachers, and students. At the last stage, the quantitative research was the whole productive teachers in the field of mathematics studies from the three schools in Klaten.

Technique and Collecting Data At the first stage (qualitative method), the researchers collected data through 1) qualitative interview, 2) observation, 3) document analysis. Next, at the final phase (quantitative method), data collection techniques were survey by using questionnaire data collection tools and observation sheets.

Observation sheets were used to reveal data variables: the impact of teacher's certification, teacher's competence, teacher's motivation, teacher's commitment and teacher's performance.

Data Analysis Technique at the first step, the qualitative method was carried out to find and manage the data systemically, the next step was quantitative method using double regression, but conducting prerequisite analysis test first.

FINDING AND DISCUSSION

A. Qualitative Analysis

Qualitatively senior high school as part of the national education system is a professional institution. The school aims to create students to become mature people with mature and resilient personality, who can be accountable, responsible for society and for themselves.

Based on the analysis of the impact teacher's certification which was dig up from the professional aspect such as the improvement of the educators' carrier and the development of the teaching profession, it still required coaching continuously in order to become more professional. This can be showed that there is still a gap between expectations and reality. It is undeniable that the certification allowance expected be able to encourage senior high school teachers to improve competence through the use of Technology and Information professionally.

Through coaching in terms of mastering the material, structure, concepts and mindset of science which support the lesson taught, a senior high school teacher has power to choose and determine the material which is relevant to the needs and abilities of

students. Based on the aspects of personality competency, the information is obtained which the most the senior high school productive teachers are in the good category, while a small percentage are in the less category. This shows that the implementation of the task as a teacher has been supported by a feeling of pride in the task entrusted to him to prepare better quality generation in the future. The variable of work commitment of senior high school productive teachers is obtained the information that most of them are in good category.

This condition gives information that the productive teachers of senior high school, most of them have the emotional bond which can not be separated from the school. They have effective preparation to support the school programs and they get the benefits of glory, comfort, happiness and prosperity form the tasks conducted at school.

The variable of teacher's performance gives the information that most them are in good category. This shows that the productive teachers of senior high school in carrying out the main tasks, the implementation the other tasks, and the development of professionalism had underwent positive change.

Variable	Indicator
Effect of teacher's certification	Pride, Professionalism, Prosperity
Teacher's Competence	Pedagogic competency, profesional, personality
Work Motivation	Independence, achievement
Teacher's Commitment	Disciplin
Teacher's Performance	Tasks Completion

B. Qualitative Analysis

Quantitative Test Results

Data Table

Responder	variabel				
	X1	X2	X3	X4	Y
1	10	15	10	15	15
2	5	10	10	10	15
3	10	10	10	30	15
4	10	10	10	20	15
5	5	15	10	10	15
6	5	15	5	15	15
7	5	15	10	30	15
8	5	10	5	15	10
9	10	15	5	15	10
10	10	10	5	15	10
11	5	10	5	20	10
12	10	5	10	15	15
13	10	15	10	15	25
14	10	5	5	20	10
15	10	15	10	25	25
16	5	10	5	10	10
17	5	10	10	15	10
18	10	10	5	15	20
19	10	15	5	15	20

Information :

- X1 = Effect of Teacher Certification
- X2 = Teacher's Competence
- X3 = Work Motivation
- X4 = Work Commitment
- Y = Teacher's Performance

The following explanation is presented how to portray the correlation between variables (Y) Teacher's performance on variables (X1) Effect of certification, (X2) Teacher's competence, (X3) Work Motivation, and (X4) Work Commitment in State Senior High School 1, State Senior High School 2 and State Senior High School 3 in Klaten .

a.

Descriptive Statistics

	Mean	Std. Deviation	N
Teacher's Performance	14.7368	4.85160	19
Effect of Certification	7.8947	2.53629	19
Teacher's Competence	11.5789	3.35519	19
Work Motivation	7.6316	2.56495	19
Work Commitment	17.1053	5.84898	19

This table describes the average values and standard deviations of each variable, from the 19 data of mathematics teachers who are still productive in State Senior High School 1, State Senior High School 2, and State Senior High School 3 in Klaten. The average value of teacher's performance is 14.7368 with the standard deviation of 4.85160. The average of effect of certification is 7.8947 with the standard deviation of 2.53629. The average of teacher's competence is 11.5789 with the standard deviation of 3.35519. The average of work motivation is 7.6316 with the standard deviation of 2.56495. The average of work commitment is 17.1053 with the standard deviation of 5.84898.

Correlations

	Teacher's Performance	Impact of Certification	Teacher's Competence	Work Motivation	Teacher's Commitment	
Pearson Correlation	Teacher's Performance	1.000	.404	.454	.394	.167
	Effect of Certification	.404	1.000	-.077	.045	.222
	Teacher's Competence	.454	-.077	1.000	.136	.034
	Work Motivation	.394	.045	.136	1.000	.258
	Teacher's Commitment	.167	.222	.034	.258	1.000
Sig. (1-tailed)	Teacher's Performance	.043	.026	.048	.247	.181
	Effect of Certification	.043	.377	.428	.446	.143
	Teacher's Competence	.026	.377	.428	.446	.143
	Work Motivation	.048	.428	.290	.290	.143
	Teacher's Commitment	.247	.181	.446	.143	.143
N	Teacher's Performance	19	19	19	19	19
	Effect of Certification	19	19	19	19	19
	Teacher's Competence	19	19	19	19	19
	Work Motivation	19	19	19	19	19
	Teacher's Commitment	19	19	19	19	19

The table illustrates the correlation among the variables. The correlation shows the close correlation between two variables. From these correlations, it can be identified that there is

a positive and significant result between teacher's performance and the effect of certification with a correlation value of 0.404 and the correlation between teacher's performance and teacher competence is 0.454. The correlation between teacher's performance and work motivation is 0.394 and the correlation between teacher's performance and work commitment is 0.164.

Variables Entered/Removed^b

Mode	Variables Entered	Variables Removed	Method
1	Teacher's Commitment, Teacher's Performance, Effect of Certification, Teacher's Competence, Work Motivation	.	Enter

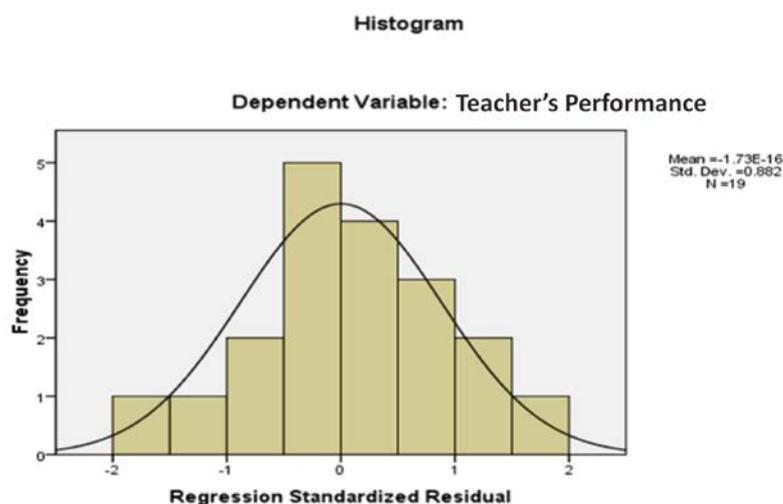
a. All requested variables entered.

b. Dependent Variable: Teacher's Performance

The table above shows that work motivation, effect of certification, teacher's competence and work commitment are variables that will be analyzed as an independent variable while the teacher's performance is the dependent variable.

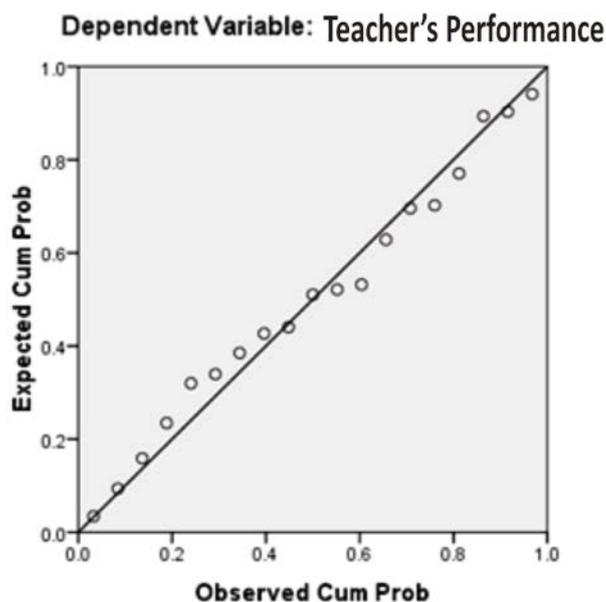
The next, at the first stage is conducted an investigation to check the results of multiple linear regression analysis with the assumption of normality, error variant and the absence of high correlations (multicollinearity) between the independent variables.

- Normalitas error



The graph above illustrates the distribution of the histogram follows a normal distribution. To support the graph above, we can see the Plot chart below:

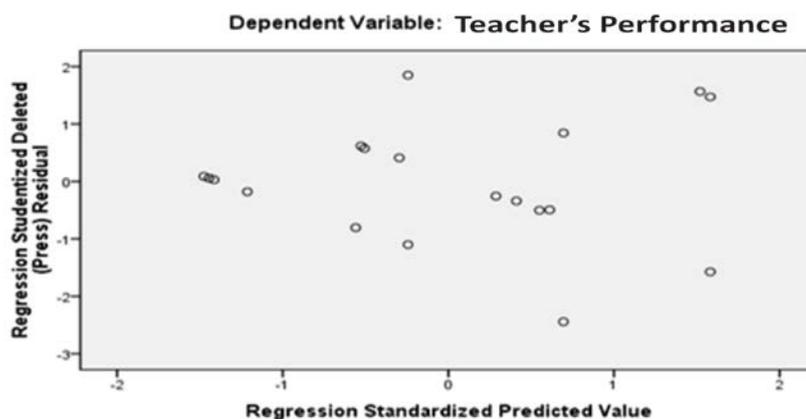
Normal P-P Plot of Regression Standardized Residual



The graph above shows that data has been scattered around the straight line so the assumptions have been fulfilled.

- Varian error konstan

Scatterplot



The data scattering of the graph is random, so it does not form a certain pattern.

- The investigation of autokeration problem.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.705 ^a	.497	.353	3.90237	1.709

a. Predictors: (Constant), Work Commitment, Teacher's Competence, Effect of Certification, Work Motivation

b. Dependent Variable: Teacher's Performance

Based on the results of the table, the calculated Durbin Watson value is 1.709, so the regression assumption is fulfilled. After the regression assumption is fulfilled, the next step is to test the regression coefficients which include overall testing and partial testing.

a) Overall testing, the hypothesis as the following:

$H_0 : \beta_0 = \beta_1 = \beta_2 = 0$

$H_1 : \text{minimal contained } \beta_1 \neq 0$

Or,

H_0 : simultaneously, teacher's competence, effect of certification, work motivation and work commitment do not affect significantly on the teacher's performance.

H_1 : at least obtained one certification effect, competence, motivation, and commitment do not have significant effect toward teacher's performance.

Testing statistics: statistics F in Tabel ANOVA

Alfa testing : 1%

Result :

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	210.485	4	52.621	3.455	.037 ^a
	Residual	213.199	14	15.229		
	Total	423.684	18			

a. Predictors: (Constant), Work Commitment, Teacher's Competence, Effect of Certification, Work Motivation

b. Dependent Variable: Teacher's Performance

P-value statistics which is F 3.455

b) Partially testing (individual) shows the hypothesis as follow:

$H_0 : \beta_1 = 0$, or effect of teacher's certification does not affect significantly on the teacher's performance

$H_1 : \beta_1 \neq 0$, effect of certification affects significantly on the teacher's performance

Or,

$H_0 : \beta_2 = 0$, or teacher's competence has no effect significantly on the teacher's performance

$H_1 : \beta_2 \neq 0$, or teacher's competence which read has significant effect on the teacher's performance

Or,

$H_0 : \beta_3 = 0$, or work motivation has no effect significantly on the teacher's performance

$H_1 : \beta_3 \neq 0$, or work motivation affects significantly on the teacher's performance,

Testing statistics : statistic t

Alfa Testing : 1%

Result :

Coefficients ^a											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-3.450	5.226		-.660	.520					
	Effect of Certification	.822	.373	.430	2.201	.045	.404	.507	.417	.944	1.060
	Teacher's Competence	.642	.278	.444	2.312	.037	.454	.526	.438	.974	1.026
	Work Motivation	.606	.374	.320	1.619	.128	.394	.397	.307	.917	1.090
	Work Commitment	-.021	.167	-.025	-.127	.901	.167	-.034	-.024	.889	1.125

a. Dependent Variable: Teacher's Performance

Based on the results of this analysis the p-value for the teacher's certification effect variable is $0.045 < 0.052$ and the p-value of the teacher's competence variable is $0.037 < 0.052$ and the p-value of the work motivation variable is $0.126 < 0.520$ and work commitment is $0.901 > 0.520$. Thus, it can be inferred that the effect of certification, teacher's competence, work motivation, work commitment has affected the teacher's performance. The result of the direct influence of the effect of teacher's certification variables on teacher's performance can be shown by the standardized coefficients Beta which shows the value of 0.430. Meanwhile the result of the effect of teacher's competence variables on teacher's performance shows a value of 0.444. While the value of work motivation variable on teacher's performance shows a value of 0.320. The result of the variable work commitment towards teacher's performance shows a value of -0.025.

Regression model formed.

$$Y = -3.450 + 0.822X_1 + 0.642X_2 + 0.606X_3 + -0.021X_4$$

The constant is -3.450 which means that if there is no effect of teacher's certification, teacher's competence, work motivation, work commitment, so the value of the teachers performance is 3,450.

C. Discussion of the Result

The analysis results on the effect of teacher's certification affect teacher's performance. This is shown that there is a positive correlation and significant result between the effect of teacher's certification, teacher's competence, work motivation, work commitment and teacher's performance. The results show that the correlation between the independent variables simultaneously on the dependent variable. The effect of certification, teacher's competence, work motivation, work commitment simultaneously have effects and significant on the teacher's performance that is equal to $Y = -3450 + 0.822X_1 + 0.642X_2 + 0.606X_3 + -0.021X_4$.

CONCLUSION

1. The dominant factors affecting teacher's performance are the effect of certification, teacher's competence, work motivation and work commitment.
2. The pattern of correlation variables that affect teacher's performance in Klaten State Senior High School.
3. There is a positive and significant correlation between the effect of teacher's certification, teacher's competence, work motivation and work commitment on the teacher's performance.
4. The results between the independent variables simultaneously with the dependent variable.

5. The effect of certification, teacher's competence, work motivation and work commitment simultaneously have effects and significant on teacher's performance, namely $Y = -3.450 + 0.822 \text{ impact of certification} + 0.642 \text{ teacher's competence} + 0.606 \text{ work motivation} + -0.021 \text{ work commitment}$.

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