The Leadership, Competency and Certification on Teacher Performance: How the Impact on Vocational Schools Students Achievement in Banten Province Area

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Abstract: *This study aims to determine the effect of principal leadership, competence, and certification on teacher performance, which impact student achievement at Vocational High Schools (SMK) in Banten. The method used is explanatory research with a sample of 88 respondents—the statistical analysis with regression testing, correlation, determination, and hypothesis testing. The results show that the principal's leadership has a significant effect on teacher performance by 35.0%. The hypothesis test obtained a significance of 0.000 <0.05, and competence significantly affects teacher performance by 23.1%. The hypothesis testing obtained a significance of 0.000 <0.05. The results also show, the certification has a significant effect on teacher performance by 23.3%; hypothesis testing is obtaining a significance of 0.000 <0.05. Principal leadership, competence, and certification simultaneously significantly affected teacher performance by 55.9%, hypothesis testing obtained a significance of 0.000 <0.05. Teacher performance significantly affected student achievement by 73.6%; hypothesis testing obtained a significance of 0.000 <0.05.*

Keywords: *Principal Leadership, Competence, Certification, Teacher Performance, Student Achievement.*

Abstrak: *Penelitian ini bertujuan untuk mengetahui pengaruh kepemimpinan kepala sekolah, kompetensi, dan sertifikasi terhadap kinerja guru yang berdampak pada prestasi belajar siswa di Sekolah Menengah Kejuruan (SMK) di Banten. Metode yang digunakan adalah penelitian eksplanatori dengan jumlah sampel 88 responden, analisis statistik dengan pengujian regresi, korelasi, determinasi, dan pengujian hipotesis. Hasil penelitian menunjukkan bahwa kepemimpinan kepala sekolah berpengaruh signifikan terhadap kinerja guru sebesar 35,0%. Uji hipotesis diperoleh signifikansi 0,000 <0,05, dan kompetensi berpengaruh signifikan terhadap kinerja guru sebesar 23,1%. Pengujian hipotesis diperoleh signifikansi 0,000 <0,05. Hasil penelitian juga menunjukkan, sertifikasi berpengaruh signifikan terhadap kinerja guru sebesar 23,3%; pengujian hipotesis diperoleh signifikansi 0,000 <0,05. Kepemimpinan kepala sekolah, kompetensi, dan sertifikasi secara simultan berpengaruh signifikan terhadap kinerja guru sebesar 55,9%, pengujian hipotesis diperoleh signifikansi 0,000 <0,05. Kinerja guru berpengaruh signifikan terhadap prestasi belajar siswa sebesar 73,6%; pengujian hipotesis diperoleh signifikansi 0,000 <0,05.*

Kata Kunci: *Kepemimpinan Kepala Sekolah, Kompetensi, Sertifikasi, Kinerja Guru, Prestasi Siswa.*

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INTRODUCTION

Technology is starting to integrate into various aspects of education, including learning—the education policies using information and communication technology to prepare human resources capable of facing global challenges. By utilizing various media and developing education-related programs, a teacher must have the skills that students need. Talking about the quality of education will not be separated from increasing teachers' competence and professionalism. The teacher is the main element in the entire educational process and at every level of education, especially at the institutional and instructional levels. Teachers are figures who carry the responsibility for realizing national education goals as described in Law no.

In the Banten region, several schools or educational institutions, both private and public, have grown and developed, where currently there are several schools scattered in various districts/cities as in the following table.

Table 1 Data on the Number of Vocational Schools in Provinces Banten

No.	Regency / City	Number of Vocational Schools
1	Pandeglang Regency	96
2	Kabutapen Lebak	58
3	Kabutapen Tangerang	200
4	Kabutapen Serang	94
5	Cilegon City	26
6	Tangerang City	130
7	City of Serang	46
8	South Tangerang City	81
amount		731
Number of Students per 2020 Approx		257,732

The table above shows that the number of schools, especially SMK, currently totals 731 schools, both private and public, spread across 8 Kapuaten / Cities.

The role of the principal is a central figure in improving the quality of education in schools. The success or failure of an educational institution, especially in an academic unit, will be significantly influenced by the principal's competence. The achievement of educational goals is highly dependent on the skills and leadership policies of the principal, who is one of the education leaders. As the school's education leader, the principal has the legal responsibility to develop staff, curriculum, and education implementation. It is where the principal's leadership's effectiveness depends on their ability to work with teachers and staff, as well as their ability to control budget management, staff development, scheduling, curriculum development, pedagogy, and assessment. Equipping the principal to have this set of abilities is considered very important. Also, to realize good school management, it is necessary to have a Principal who has the ability according to his job demands.

Apart from the principal, teacher certification is one way to improve teachers' quality and professionalism, so that all teachers must have a certificate as a teaching license or permit in the future. Thus, efforts to establish professional teachers in Indonesia will soon become a reality, as expected. The more the quality and professionalism of teachers, the better the quality of the country. That is the general assumption of a country's education program. Education is an effort to educate the nation's life and improve human dignity through education, and it is hoped that the improvement of human life can be achieved in a perfect direction. The implementation of educational programs is supported by democratic and professional leadership,

In this case, the teacher is not merely a teacher who transfers knowledge to students, but the teacher also transfers values and a mentor who provides direction and guides all students in learning. Teachers are the principal capital in the field of education. As the principal capital in education, teachers have thoughts, feelings, status, desires, and heterogeneous backgrounds.

The teacher's competence very much determines teacher performance, and one of the requirements for getting teacher certification is qualified competence and mastery of a good curriculum outlined in excellent and comprehensive teaching.

In general, good education starts with the successful performance of the teachers shown. Teachers who have good performance will undoubtedly foster enthusiasm and motivation or student achievement that is even better than before, ultimately improving overall learning outcomes. On the other hand, if the teacher's performance is not good, students will experience weaknesses in their learning achievement to be less than optimal in achieving the expected achievements.

Based on the explanation above, the authors are interested in research under the title "The Influence of Principal Leadership, Competence and Certification on Teacher Performance, " which impacts student achievement at Vocational High Schools (SMK) Banten Region".

LITERATURE REVIEW
Principal Leadership

A school principal's leadership determines a school institution's success or failure because the principal undertakes to influence teachers and administrative staff (their subordinates) to effectively and efficiently achieve predetermined goals and objectives. Leaders have a dominant role in an organization, and this dominant role can affect job satisfaction and quality or the performance of an organization. Leadership in English means "The qualities that a leader should have" or The qualities of the leader. According to Abdul Rahman Saleh (2006), "leadership is influencing others to achieve predetermined goals, relating to processes that influence people so that they achieve goals in certain circumstances". With that, the ability of leadership skills in direction is an essential factor in teaching effectiveness. In language, the meaning of leadership is the strength or quality of a leader in directing what leads to achieving goals. Many experts, including Stoner, have defined leadership argued that managerial leadership could be defined as a process of directing, giving influence to the activities of a group of members who are interrelated with their duties and obligations.

Competence

According to the General Indonesian Dictionary by Purwadarminto (1999: 405), the notion of competence is the power to determine or decide something. The basic definition of competence is an ability or skill. According to C. Lynn (1985: 33), "competence my range from recall and understanding of fact and concepts to advanced motor skills, the teaching behaviours and professional values". Competence can range from reiterating facts and concepts to advanced motor skills to learning behaviours and professional values. Spencer and Spencer in Hamzah B. Uno (2007: 63), competence is a characteristic that stands out for a person and becomes ways of behaving and thinking in all situations and takes place over a long period.

Certification

According to Bedjo Sujanto (2009: 9), teacher certification is "a program designed to see teachers' feasibility in acting as learning agents who can realize the goals of national education. In order for teachers to be registered as certification participants, they must prepare complete documents as required.

Teacher Performance

Performance is defined as an expression of ability based on knowledge, attitudes, skills and motivation to produce something. Teacher performance is the performance or performance carried out by teachers in carrying out their duties as educators, and the quality of teachers will significantly determine the quality of educational outcomes because teachers are the ones who have the most direct contact with students in the learning process in school educational institutions, and this is the case. It is determined by one factor, but many things affect determining the increase in teacher performance. Referring to the regulation of the Minister for State Apparatus Empowerment No. 16 of 2009, there are indicators of teacher performance appraisal, namely: Mastering teaching materials, Planning the teaching and learning process,

Student achievement

A student's achievements cannot be separated from learning activities because learning is a process, while learning achievement results from students' and educators' learning process. The success or failure of a child in education is very dependent on the learning process experienced by the child. Achievements are the results that a person has achieved in carrying out activities. Gagne (1985: 40) states that learning achievement can be divided into five aspects, namely: intellectual abilities, cognitive strategies, verbal information, attitudes and skills. According to Bloom in Suharsimi Arikunto (1990: 110) that learning outcomes can be divided into three aspects, namely cognitive, affective and psychomotor. Achievement is the result of an activity that has been done, created either individually or as a group (Djamarah, 1994: 19)

RESEARCH METHODS

The population in this study amounted to 88 respondents of Vocational High Schools (SMK) in Banten. This study's sampling technique was a saturated sample, where all members of the population were sampled. Thus the sample in this study amounted to 88 respondents. This type of research is associative, where the aim is to find out how to find a connection. Furthermore, in analyzing the data, used instrument test, classical assumption test, regression, coefficient of determination and hypothesis testing.

RESEARCH RESULT

1. Descriptive Analysis

This test is used to determine the highest minimum and maximum score, the rating score, and each variable's standard deviation. The results are as follows:

Table 1. Results of Descriptive Statistics Analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Leadership Principal (X1)	88	15	30	24.25	2,793
Competence (X2)	88	14	30	24.00	3,044
Certification (X3)	88	17	30	24.33	2,782
Teacher Performance (Y)	88	18	30	25.08	2,679
Student Achievement (Z)	88	18	30	24.55	2,421
Valid N (listwise)	88				

The principal's leadership obtained a minimum variance of 15 and a maximum variance of 30 with a rating score of 24.25 with a standard deviation of 2.793. For competence, the minimum variance is 14, and the maximum variance is 30 with a rating score of 24.00 with a standard deviation of 3.044. Certification obtained a minimum variance of 17—a maximum variance of 30 with a rating score of 24.33 with a standard deviation of 2.782. The teacher's performance obtained a minimum variance of 18 and a maximum variance of 30 with a rating score of 25.08 with a standard deviation of 2.679. Student achievement obtained a minimum variance of 18 and a maximum variance of 30 with a rating score of 24.55 with a standard deviation of 2.421.

2. Verification Analysis.

This analysis aims to determine the effect of the independent variable on the dependent variable. The test results are as follows:

a. Multiple Linear Regression Analysis

This regression test is intended to determine changes in the dependent variable if the independent variable changes. The test results are as follows:

Table 2. Multiple Linear Regression Test Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1,029	2,359		.436	.000
	Leadership Principal (X1)	.412	.074	.429	5,557	.000
	Competence (X2)	.296	.066	.336	4,495	.000
	Certification (X3)	.287	.074	.298	3,896	.000

a. Dependent Variable: Teacher Performance (Y)
a. Dependent Variable: Teacher performance (Y)

Based on the test results in the table above, the regression equation Y = 1.029 + 0.412X1 + 0.296X2 + 0.287X3 is obtained. From this equation, it is explained as follows:

1) A constant of 1.029 means that if the principal's leadership, competence and certification are not available, there is a teacher performance score of 1.029 points.
2) The principal leadership regression coefficient is 0.412; this figure is positive, meaning that every time there is an increase in the principal's leadership of 0.412 points, the teacher's performance will also increase by 0.412 points.
3) The competency regression coefficient is 0.296; this number is positive, meaning that every time there is an increase in competence of 0.296 points, the teacher's performance will also increase by 0.296 points.
4) The certification regression coefficient is 0.287; this figure is positive, meaning that every time there is an increase in certification of 0.287 points, the teacher's performance will also increase by 0.287 points.

b. Correlation Coefficient Analysis

Correlation coefficient analysis is intended to determine the level of strength of the relationship between the independent variable and the dependent variable either partially or simultaneously. The test results are as follows:

Table 3. The Results of Correlation Coefficient Testing of Principal Leadership on Teacher Performance.

Correlationsᵇ

		Leadership Principal (X1)	Teacher Performance (Y)
Leadership Principal (X1)	Pearson Correlation	1	.592 **
	Sig. (2-tailed)		.000
Teacher Performance (Y)	Pearson Correlation	.592 **	1
	Sig. (2-tailed)	.000	

**. Correlation is significant at the 0.01 level (2-tailed).
b. Listwise N = 88

The test results obtained a correlation value of 0.592, meaning that the principal's leadership has a moderate relationship with teacher performance.

Table 4. Results of Competency Correlation Coefficient Testing Against Teacher Performance.

Correlationsᵇ

		Competence (X2)	Teacher Performance (Y)
Competence (X2)	Pearson Correlation	1	.481 **
	Sig. (2-tailed)		.000
Teacher Performance (Y)	Pearson Correlation	.481 **	1
	Sig. (2-tailed)	.000	

**. Correlation is significant at the 0.01 level (2-tailed).
b. Listwise N = 88

The test results obtained a correlation value of 0.481 means that competence has a moderate relationship with teacher performance.

Table 5. Results of Certification Correlation Coefficient Testing on Teacher Performance.

Correlationsᵇ

		Certification (X3)	Teacher Performance (Y)
Certification (X3)	Pearson Correlation	1	.482 **
	Sig. (2-tailed)		.000
Teacher Performance (Y)	Pearson Correlation	.482 **	1
	Sig. (2-tailed)	.000	

**. Correlation is significant at the 0.01 level (2-tailed).
b. Listwise N = 88

The test results obtained a correlation value of 0.482 means that certification has a moderate relationship with teacher performance.

Table 6. Results of Correlation Coefficient Testing of Principal Leadership, Competence and Certification simultaneously on Teacher Performance.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.748a	.559	.543	1,811

a. Predictors: (Constant), Certification (X3), Competence (X2), Principal Leadership (X1)

Based on the test results obtained, a correlation value of 0.748 means that the principal's leadership, competence and certification simultaneously have a solid relationship to teacher performance.

Table 7. Results of Correlation Coefficient Testing of Teacher Performance on Student Achievement.

Correlations[b]

		Teacher Performance (Y)	Student Achievement (Z)
Teacher Performance (Y)	Pearson Correlation	1	.858 **
	Sig. (2-tailed)		.000
Student Achievement (Z)	Pearson Correlation	.858 **	1
	Sig. (2-tailed)	.000	

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

b. Listwise N = 88

The test results obtained a correlation value of 0.858 means that teacher performance has a strong relationship with student achievement.

c. Analysis of the coefficient of determination

The coefficient of determination is intended to determine the independent variable's influence on the dependent variable either partially or simultaneously. The test results are as follows:

Table 8. The Results of Testing the Principal Leadership Determination Coefficient on Teacher Performance.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.592a	.350	.343	2,172

a. Predictors: (Constant), Principal Leadership (X1)

Based on the test results, it was found that the value of determination was 0.350, meaning that the principal's leadership had an influential contribution of 35.0% on teacher performance.

Table 9. Results of Competency Determination Coefficient Testing on Teacher Performance.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.481a	.231	.222	2,363

a. Predictors: (Constant), Competence (X2)

Based on the test results, it was found that the determination value was 0.231, meaning that competence had an influential contribution of 23.1% on teacher performance.

Table 10. The Results of Testing the Certification Determination Coefficient on Teacher Performance.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.482a	.233	.224	2,361

a. Predictors: (Constant), Certification (X3)

The test results obtained a determination value of 0.233, meaning that certification had an influential contribution of 23.3% to teacher performance.

Table 11. The Results of Testing the Principal Leadership Determination Coefficient, Competence and Certification of Teacher Performance.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.748a	.559	.543	1,811

a. Predictors: (Constant), Certification (X3), Competence (X2), Principal Leadership (X1)

The test results obtained a determination value of 0.559, meaning that the principal's leadership, competence, and certification simultaneously contributed 55.9% to teacher performance, while other factors influenced the remaining 44.1%.

Table 12. The Results of Testing the Coefficient of Determination of Teacher Performance on Student Achievement.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.858a	.736	.733	1,250

a. Predictors: (Constant), Teacher Performance (Y)

Based on the test results, it was found that the value of determination was 0.736, meaning that the teacher's performance had an influence of 73.6% on teacher performance.

d. Hypothesis testing
Partial hypothesis test (t-test)
Hypothesis testing with the t-test is used to determine which partial hypothesis is accepted. The test results are as follows:

Table 13. The Results of Principal Leadership Hypothesis Test on Teacher Performance.

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	11,310	2,035		5,557	.000
	Leadership Principal (X1)	.568	.083	.592	6,809	.000

a. Dependent Variable: Teacher Performance (Y)

Based on the test results in the table above, the t count> t table or (6.809> 1.988) is obtained; thus, the hypothesis that there is a significant influence between the principal's leadership teacher performance is accepted.

Table 14. Results of Competency Hypothesis Test on Teacher Performance.

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	14,926	2013		7,413	.000
	Competence (X2)	.423	.083	.481	5,083	.000

a. Dependent Variable: Teacher Performance (Y)

Based on the test results in the table above, the value of t count> t table or (5.083> 1.988) is obtained; thus, the hypothesis that there is a significant influence between competence on teacher performance is accepted.

Table 15. Results of Certification Hypothesis Testing on Teacher Performance.

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	13,783	2,227		6,188	.000
	Certification (X3)	.464	.091	.482	5,104	.000

a. Dependent Variable: Teacher Performance (Y)

Based on the test results in the table above, the value of t count> t table or (5.104> 1.988) is obtained; thus, the hypothesis that there is a significant effect between certification on teacher performance is accepted.

Table 16. Hypothesis Test Results of Teacher Performance on Student Achievement.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5,099	1,262		4,042	.000
	Teacher Performance (Y)	.775	.050	.858	15,500	.000

a. Dependent Variable: Student Achievement (Z)

Based on the test results in the table above, the value of t count> t table or (15,500> 1,988) is obtained; thus, the hypothesis that there is a significant effect between certification on teacher performance is accepted.

Simultaneous Hypothesis Test (Test F)

Hypothesis testing with the F test is used to determine which simultaneous hypothesis is accepted. The fourth hypothesis There is a significant influence between principal leadership, competence and certification on teacher performance.

Table 17. Results of Principal Leadership Hypothesis Test, Competence and Certification of Teacher Performance.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	349,008	3	116,336	35,479	.000b
	Residual	275,435	84	3,279		
	Total	624,443	87			

a. Dependent Variable: Teacher Performance (Y)
b. Predictors: (Constant), Certification (X3), Competence (X2), Principal Leadership (X1)

Based on the test results in the table above, it is obtained that the value of F count> F table or (35.479> 2.480); thus, the fourth hypothesis proposed that there is a significant influence between principal leadership, competence and certification on teacher performance is accepted.

DISCUSSION OF RESEARCH RESULTS

1. The Influence of Principal Leadership on Teacher Performance

Principal leadership has a significant effect on teacher performance with a correlation of 0.592 or has a moderate relationship with an influential contribution of 35.0%. Hypothesis testing obtained t value> t table or (6.809> 1.988). Thus the hypothesis proposed that a significant effect between the principal's leadership on teacher performance is accepted.

2. The Effect of Competence on Teacher Performance

Competence has a significant effect on teacher performance with a correlation of 0.481 or has a moderate relationship with an influential contribution of 23.1%. Hypothesis testing

obtained the value of t count> t table or (5.083> 1.988). Thus the hypothesis proposed that there is a significant effect between competence on teacher performance is accepted.

3. The Effect of Certification on Teacher Performance

Certification has a significant effect on teacher performance with a correlation of 0.482 or has a moderate relationship with an influential contribution of 23.3%. Hypothesis testing obtained t value> t table or (5.104> 1.988). Thus the hypothesis proposed that there is a significant effect between competence on teacher performance is accepted.

4. The Influence of Principal Leadership, Competence and Certification on Teacher Performance

Principal leadership, competence and certification have a significant effect on teacher performance by obtaining the regression equation Y = 1.029 + 0.412X1 + 0.296X2 + 0.287X3, the correlation value is 0.748 or has a strong relationship with the contribution of influence of 55.9% while the rest is 44, other factors influence 1%. Hypothesis testing obtained the value of F count> F table or (35.479> 2.480). Thus the hypothesis proposed that there is a significant effect between principal leadership, competence and certification on teacher performance is accepted.

5. The Effect of Teacher Performance on Student Achievement

Teacher performance has a significant effect on student achievement with a correlation of 0.858 or has a strong relationship with an influential contribution of 73.6%. Hypothesis testing obtained t value> t table or (15,500> 1,988). Thus the hypothesis proposed that there is a significant effect between teacher performance and student achievement is accepted.

CONCLUSIONS

a. Principal leadership has a significant effect on teacher performance, with an influence contribution of 35.0%. Hypothesis testing obtained the value of t count> t table or (6.809> 1.988).

b. Competence has a significant effect on teacher performance, with an influence contribution of 23.1%. Hypothesis test obtained t value> t table or (5.083> 1.988).

c. Certification has a significant effect on teacher performance, with an impact contribution of 23.3%. Hypothesis testing obtained the value of t count> t table or (5.104> 1.988).

d. Principal leadership, competence, and certification significantly affect teacher performance with an influence contribution of 55.9%, while other factors influence the remaining 44.1%. Hypothesis testing obtained the value of F count> F table or (35.479> 2.480).

e. Teacher performance has a significant effect on student achievement, with an impact contribution of 73.6%. Hypothesis test obtained t value> t table or (15,500> 1,988).

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