

The Influence of Principals Academic Supervision on Teachers Pedagogical Competence in Public Junior High Schools in North Padang District

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ABSTRACT

This study aims to analyze the influence of the principal's academic supervision on the pedagogical competence of teachers in public junior high schools in North Padang District. Teacher pedagogical competence is an ability that must be possessed by a teacher, but some teachers experience problems characterized by teachers who have difficulty in adapting learning methods to student learning styles, creating an active learning atmosphere, and lacking in utilizing learning technology. One factor suspected to be an influence on these problems is the principal's academic supervision which includes the implementation of supervision, the tools used during supervision, and the results of follow-up supervision. This study uses a quantitative approach with a correlational research type. The study population comprised all teachers at public junior high schools in North Padang District, with a sample of 103 teachers selected using proportional stratified random sampling. Data were collected using a questionnaire that had been tested for validity and reliability. Data analysis was conducted using descriptive statistics and simple linear regression. The results showed that the principal's academic supervision was in the very good category, while the teachers' pedagogical competence was also in the very good category. The regression test results indicated that the principal's supervision significantly influenced the teachers' pedagogical competence. This finding indicates that the better the quality of academic supervision, the better the teachers' pedagogical competence. Therefore, teachers need to improve their pedagogical competence, especially in the teaching and learning process in the classroom. Because learning implementation is a key to success in improving student learning outcomes, supervision should be conducted weekly for teachers, and supervisors should provide regular training to improve teachers' pedagogical competence.

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1. INTRODUCTION

Education is essentially a process for enlightening the nation's life while simultaneously shaping character, which serves as the foundation for civilization and progress. A society or nation struggles to develop without a sound education system, as the absence of education leaves them behind and lacking in civilized human values. Similarly, Munir (2008) emphasized that the advancement of civilization always relies on an educational model that is effectively designed and able to respond to the needs and challenges of the times. Education is viewed as a long-term investment that plays a crucial role in developing the quality of human resources. Fidmatan (2024) emphasized that education has strategic value because it is the

foundation for the sustainability and development of human civilization in the future. Education in Indonesia is still not fully implemented.

Therefore, supervision is crucial in education because it can assist teachers in their professional development to achieve learning objectives. Supervision is conducted to provide direction, assistance, and guidance to teachers so that they teach according to expectations (Ramadhani & Hadiyanto, 2022). Teachers, as implementers of the educational process, must possess adequate competencies to develop the potential of students, thus producing quality human resources, particularly in teacher pedagogical competency. (Anggraini, 2022) explains that pedagogical competency is the ability to manage student learning, including understanding students, designing and implementing learning, evaluating learning outcomes, and developing students to actualize their various potentials. However, in reality, even though academic supervision has been carried out, not all teachers have shown a significant increase in pedagogical competence. Many teachers are still less creative in using learning tools or media which has an impact on the low understanding of students on the material being taught. Teachers are less varied in using the teaching methods provided, on average teachers still use the lecture method in the learning process in class, providing a material then giving assignments without any in-depth material through discussion and some teachers also still use regional languages in the learning process so that students who do not master the regional language do not understand the material delivered by the teacher.

Meanwhile, government regulation number 74 of 2008 concerning teachers explains that teachers have an obligation to understand pedagogical competence as referred to in paragraph (2) which is the teacher's ability to manage student learning which at least includes: 1) understanding educational insight or foundation, 2) understanding students, 3) curriculum or syllabus development, 4) learning design, 5) implementation of educational and dialogical learning, 6) utilization of learning technology, 7) evaluation of learning outcomes, and 8) development of students to actualize their various potentials. The quality of education is greatly influenced by teacher competence, especially pedagogical competence which is the main ability of teachers in managing learning effectively and innovatively. Teacher pedagogical competence includes understanding student characteristics, mastery of subject matter, and the ability to design and implement learning processes in accordance with the curriculum. However, in practice, there are still teachers who are not optimal in implementing these pedagogical competences in the classroom.

One effort to improve teachers' pedagogical competence is through academic supervision conducted by the principal. The principal plays a strategic role in academic supervision as a form of coaching and oversight of the learning process taking place in the school (Putra & Wulandari, 2021). Effective academic supervision can provide guidance, evaluation, and follow-up that support improvements in the quality of learning and teacher competence. This teacher and educational personnel development program is commonly referred to as educational supervision, and is one of a series of activities in educational management (Fitri, 2024).

According to Meirisa & Hadiyanto (2020), the principal, as a supervisor, plays a role in overseeing improvements in teacher competency and the quality of teaching in the classroom to achieve effective and efficient learning objectives. This is inseparable from the teacher's role in implementing the learning process optimally. Academic supervision is one effort that can be made to provide services and assistance to teachers. Academic supervision is an effort to provide assistance to teachers so they can improve the quality of their learning process or, in other words, improve teacher competence. As an educational supervisor, the principal should be able to guide teachers to improve their work competency and the quality of their learning process so that it can be effective and efficient (Collins et al., 2021).

As educational supervisors, principals are obligated to guide, direct, and develop teachers in carrying out their duties. Coaching is essentially an effort to improve skills. Teacher coaching and guidance significantly impact the continuity and smoothness of the teaching and learning process. This aligns with Sebertian's (2008:19) opinion, which states that supervision is an effort to provide services and assistance to teachers, both individually and as a group, in an effort to improve the learning process. A supervisor must focus their attention on all steps to improve and enhance the quality of learning that have been jointly decided upon.

Several researchers have conducted similar research, including Fitri (2024), Anggraini (2022), Haryati et al. (2025), and Firdaus et al. (2022). These studies have examined teacher performance, school quality, principal supervision, and analyzed teachers' pedagogical competencies. The novelty of this research addresses a crucial issue that needs research and has not received adequate attention before: an in-depth study of the principal's supervision of teachers' pedagogical competence. Therefore, this research is crucial to determine the influence of principals' academic supervision on teachers' pedagogical competence.

Based on this description, this study aims to analyze the influence of principals' academic supervision on teachers' pedagogical competence in public junior high schools in North Padang District. This research is expected to contribute to the development of educational administration, particularly in improving communication skills with students as part of strengthening pedagogical competence.

2. METHOD, DATA, ANALYSIS

This study used a quantitative approach with a correlational approach. The aim was to determine the effect of the principal's academic supervision variable (X) on teacher pedagogical competence (Y) in public junior high schools in North Padang District. The sample was selected using a proportional stratified random sampling technique, considering the number of teachers in each school. This resulted in a representative sample of the entire study population of 103 teachers.

The research instrument was a questionnaire structured based on the indicators of each variable and tested for validity and reliability. The questionnaire used a five-alternative Likert scale to measure respondents' opinions, with the answer options being always (5), often (4), sometimes (3), rarely (2), and never (1).

Data analysis was performed using the computer program SPSS 27 for Windows. Validity and reliability tests were conducted to ensure data accuracy. The validity test identified items that did not meet standards, while the reliability test used Cronbach's Alpha to ensure the instrument's internal consistency. Data were analyzed using a normality test to examine the distribution of residuals and a linearity test to determine the relationship between variables. Hypothesis testing was conducted using a simple linear regression test to test or predict the effect of one dependent variable on the independent variable, as well as a t-test to measure the significance of the correlation. The coefficient of determination (R^2) was used to measure the effect of the principal's academic supervision on teachers' pedagogical competence.

3. RESULT AND DISCUSSION

Teacher Pedagogical Competence

Pedagogical competence is a fundamental skill that a teacher must possess in managing the entire learning process. This competence relates not only to delivering material but also encompasses a deep understanding of student characteristics, the ability to systematically design learning, the skills to implement effective teaching and learning activities, and the ability to assess learning outcomes.

Based on the tabulation of teacher pedagogical competence data, the average score was 23.17, with a respondent achievement rate of 92.6%, placing it in the high category. The table shows the highest average score for conducting educational learning (23.90, representing 95.6%), while the lowest average score was for evaluating learning outcomes (22.11, representing 88.3%). This indicates that the pedagogical competence of teachers in public junior high schools in North Padang District is very good. For more details on each indicator, see the following table:

Table 1. Results of Achievement of Teacher Pedagogical Competence Indicators				
NO	Indicator	Total		
		Average	TCR	Classification
1	Understand student characteristics	23,50	94,0%	Very good
2	Developing curriculum/syllabus	23,75	95,0%	Very good
3	Organizing educational learning	23,90	95,6%	Very good
4	Leveraging learning technology	22,68	90,7%	Very good
5	Developing student potential	23,06	92,2%	Very good
6	Evaluation of learning outcomes	22,11	88,4%	Good
Results		23,17	92,6%	Very good

From the table above, it can be seen that the highest average score is in organizing educational learning, namely 23.90 with a percentage of 95.6%, while the lowest average score is in the learning outcome evaluation indicator, namely 22.11 with a percentage of 88.3%, meaning that the pedagogical competence of teachers in State Junior High Schools in North Padang District is very good.

Academic Supervision

Table 2. Academic Supervision Indicator Achievement Results

NO	Indicator	Total		
		Average	TCR	Classification
1	Briefing	28,36	94,5%	Very good
2	Help solve problems	28,54	95.1%	Very good
3	Carry out supervision	28,23	94,1%	Very good
4	Creating interpersonal relationships	29,1	96,9%	Very good
5	Assessment of work results	28,77	95,8%	Very good
Results		28,6	95,3%	Very good

Based on the table above, it can be seen that the highest average score is in the indicator of creating interpersonal relationships, namely 29.1 with a percentage of 96.9%, while the lowest average score is in the indicator of implementing supervision, namely 28.23 with a percentage of 94.1%. In general, the average score of academic supervision of principals in Public Junior High Schools in North Padang District is 28.6 with a percentage of 95.3%, meaning that academic supervision of principals in Public Junior High Schools in North Padang District has been implemented very well. However, it still needs to be improved, ideal academic supervision is a process of coaching and mentoring carried out by the principal or supervisor to improve the quality of learning carried out by teachers. The main purpose of academic supervision is to improve the quality of the learning process carried out by teachers so that educational goals can be achieved optimally.

The Influence of the Principal's Academic Supervision on Teachers' Pedagogical Competence

A simple linear regression test analysis was carried out to determine the direction of the influence of the independent variable on the dependent variable, whether positive or negative, using the SPSS version 27 application, and the following results were obtained:

Table 3. Hypothesis Test of Academic Supervision and Teacher Pedagogical Competence

ANOVA Table						
			Sum of Squares	df	Mean Square	Sig.
Pedagogical Competence of Academic Supervision	Between Groups	(Combined)	5732.847	21	272.993	6.483
		Linearity	3701.657	1	3701.657	87.902
		Deviation from Linearity	2031.190	20	101.559	2.412
	Within Groups		3410.998	81	42.111	
	Total		9143.845	102		

The results in the SPSS version 27 output table show that the calculated F-value is 6.483 with a significance level of $0.00 < 0.05$. Therefore, it can be concluded that the academic supervision variable (X) has an influence on the teacher pedagogical competence variable (Y). A t-test was then conducted to determine the significant effect of the principal's academic supervision on teacher pedagogical competence.

Partial Test (Uji T)

Table 4. Initial Test of Academic Supervision and Teacher Pedagogical Competence

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	31.472	12.998		2.421
	Academic Supervision	.752	.091	.636	8.288

a. Dependent Variable: Pedagogical Competence

Based on the results of the t-test (Perial) from SPSS 27 that have been analyzed, the table above shows the results that the resulting regression test has a constant of 31.472 with a standard error value of 12.998 which shows that if there is no influence from the independent variable of the principal's academic supervision, then the predicted value of the teacher's pedagogical competence is 31.472. Based on the significance value from the table above, a significance value of $0.000 < 0.05$ is obtained, so it can be concluded that the academic supervision variable (X) has an effect on the teacher's pedagogical competence variable (Y) in Public Junior High Schools throughout North Padang District.

This test uses two coefficients, namely a constant and a regression coefficient for the academic supervision variable. Based on the SPSS 27 output table, the constant coefficient is 31.472 with a standard error of 12.998. Meanwhile, the regression coefficient for academic supervision is 0.752 with an error of 0.091. From the t-value obtained, which is 8.288 for the academic supervision variable, it can be seen that this value has a significance level of 0.000. A significance value smaller than 0.05 indicates that the null hypothesis (H0) which states that there is no influence of the principal's academic supervision on teachers' pedagogical competence is rejected. In other words, the principal's academic supervision variable has a significant influence on teachers' pedagogical competence (Ha) is accepted.

In this analysis, the beta coefficient of 0.636 indicates a fairly strong positive correlation between the principal's academic supervision and teacher pedagogical competence. This means that the better the academic supervision, the better the teacher's pedagogical competence. A constant of 31.472 indicates that, without the influence of the principal's academic supervision variable, the teacher's pedagogical competence score in public junior high schools in North Padang District was 31.472.

The conclusion of this partial t-test indicates that the principal's academic supervision has a significant and positive influence on teacher pedagogical competence. With a t-value of 8.288 and a significance level of 0.000, it can be concluded that the principal's academic supervision plays a crucial role in improving teacher pedagogical competence. The higher the quality of academic supervision, the higher the teacher's pedagogical competence.

Coefficient of Determination Test

The coefficient of determination is used to predict how much the independent variable (principal's academic supervision) contributes to the related variable (teacher's pedagogical competence) using the SPSS version 27 application, which produces the following results:

Table 5. Determination Test

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.636 ^a	.405	.399	7.341
a. Predictors: (Constant), Academic Supervision				

Based on the results above, the coefficient of determination (R Square) is 0.405, obtained by squaring the correlation coefficient with a value of 0.636 ($0.636 \times 0.636 = 0.405$). This coefficient of determination indicates that the principal's academic supervision variable has a 40.5% influence on teacher pedagogical competence, while the remaining $100\% - 40.5\% = 59.5\%$ is influenced by other variables not examined in this study.

In conclusion, the results of the determination test have proven that the principal's academic supervision has a significant influence on teacher pedagogical competence in public junior high schools in North Padang District. These results demonstrate the importance of conducting academic supervision by the principal to improve teacher pedagogical competence.

4. CONCLUSION

Based on the research results and data analysis using simple linear regression techniques, several conclusions can be drawn. The pedagogical competence of teachers in public junior high schools in North Padang District is very good, with a respondent achievement rate of 92.6%. Principals' academic supervision in public junior high schools in North Padang District is also very good, with a respondent achievement rate of 95.3%. There is a significant positive and significant effect of 40.5% between principals' academic supervision and teachers' pedagogical competence. This means that good academic supervision will be followed by an increase or change in teachers' pedagogical competence.

These findings confirm that routine and consistent principal academic supervision can bring about changes in teachers' pedagogical competence and improve the quality of the learning process, thus optimally achieving educational goals.

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