

Research Article

The Influence of Academic Supervision, Instructional Leadership Style, And Work Discipline on Elementary School Quality

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ABSTRACT

School quality is crucial in supporting student success. This study aims to analyze the influence of Academic Supervision, Instructional Leadership Style, and Work Discipline on the Quality of Elementary Schools in Dempet District, Demak Regency. The specific objective of this research is to determine the extent to which each of these variables individually and collectively affects the improvement of elementary school quality. This study employs a quantitative correlational approach with a survey research design. The research population consists of 458 teachers, with a sample of 151 teachers selected. Data were collected using a questionnaire. Data analysis was conducted through descriptive statistics, prerequisite tests, simple linear regression analysis, and multiple regression analysis. The results indicate that Academic Supervision, Instructional Leadership Style, and Work Discipline have a positive and significant effect on School Quality. The regression equation for Academic Supervision is $Y = 4.737 + 0.223X_1$, with an R-Square value of 0.027, indicating a small contribution to school quality. Instructional Leadership Style has a significant effect, with the equation $Y = 36.022 + 0.967X_2$ and an R-Square value of 0.238, explaining 23.8% of the variation in school quality. Work Discipline also has a significant effect, with the equation $Y = 48.063 + 0.530X_3$ and an R-Square value of 0.230, contributing substantially to educational quality. The combined regression model of the three variables results in the equation $Y = 4.737 + 0.223X_1 + 0.740X_2 + 0.406X_3$ and an R-Square value of 0.361, explaining 36.1% of the variation in school quality, demonstrating the significant contribution of these three variables in improving school quality.

Keywords: Academic Supervision; Instructional Leadership; Work Discipline; School Quality

1. INTRODUCTION

Education is the main pillar of national development as it plays a crucial role in improving the quality of human resources (Anggraeni, Haryanti, & Sudana, 2022). Education serves as a means of transforming cultural values passed down from generation to generation. In this context, schools, as formal educational institutions, have the responsibility to develop students' potential in accordance with the national education goals outlined in Law No. 20 of 2003 on the National Education System. To achieve high-quality education standards, schools must meet various national standards, including content standards, process standards, graduate competency standards, educational personnel standards, facilities and infrastructure standards, management standards, financing standards, and assessment standards (Undang-undang Sisdiknas pasal 35 ayat 1). The quality of primary education in Dempet District, Demak Regency, still faces various challenges. Based on the 2023 Education Report data, several school quality indicators show suboptimal results. Learning quality achieved a score of 53.26%, inclusivity climate 44.22%, and resource utilization only 23.63%.

Table 1. Education Report Data for Elementary Schools in Dempet District 2023

No.	Achivement Indicator	Achievement Score	Achievement Label
D1	Learning Quality	53,26	Low
D10	Inclusivity Climate	44,22	Low
E2	Proportion Of Resource Utilization for Quality Improvement	23,63	Low

These table indicate the need for improvement in various aspects, including work discipline, leadership effectiveness, and more systematic academic supervision. One of the key factors influencing school quality is academic supervision. Hadis and Nurhayati (2016) state that academic supervision functions to improve learning quality through well-planned strategies, systematic observation, and objective feedback. However, the implementation of academic supervision in Dempet District has not yet been optimal. Data shows that only 53% of school principals conducted academic supervision in the first semester, and this number declined to 31% in the second semester. This reflects that academic supervision has not yet been fully implemented as an instrument for improving education quality.

In addition to academic supervision, the instructional leadership style of school principals also contributes to school quality improvement. Aslam (2022) explains that instructional leadership refers to the efforts of school principals in creating a conducive working environment to ensure optimal learning outcomes. School principals with effective instructional leadership can enhance teachers' work motivation, which ultimately impacts students' learning achievements. Unfortunately, in Dempet District, many school principals still face challenges in implementing ideal instructional leadership. Besides academic supervision and instructional leadership, another factor influencing school quality is teachers' work discipline. Uno (2016) emphasizes that high work discipline improves teachers' performance and positively impacts learning quality. However, available data shows that only 34.8% of teachers comply with working hours regulations, and only 29.71% submit administrative tasks on time. This indicates that challenges remain in improving teachers' discipline, which affects the effectiveness of the teaching and learning process in primary schools.

Based on the issues outlined, this study aims to explore the influence of academic supervision, school principals' instructional leadership, and teachers' work discipline on the quality of primary schools in Dempet District, Demak Regency. By identifying these factors, this research is expected to provide recommendations that can be applied to improve education quality in the region. School quality refers to the extent to which the effectiveness of education meets established standards. Mesiono (2016) states that school quality is the alignment between educational services and stakeholder needs. Suryadi & Mulyana (2017) add that school quality describes the extent to which educational institutions can optimize resources to enhance the learning process. According to Umiarso & Gojali (2018), school quality can also be defined as the success level of education management in achieving both academic and non-academic student achievements. The dimensions and indicators of school quality most relevant to this study refer to Suryadi (2017), who categorizes them into three main aspects: (1) Input: Teacher qualifications, availability of facilities and infrastructure, and curriculum relevance to modern developments. (2) Process: Effectiveness of teaching methods, teacher and student engagement in the learning process, and innovative learning management. (3) Output: Student academic performance, social skills, and graduates' readiness to continue to the next educational level.

Academic supervision is a guidance and evaluation process aimed at improving teachers' professionalism in carrying out their duties. Sergiovanni (as cited in Masaong, 2013) defines it as an effort to direct and guide teachers to become more effective in teaching. Sagala (2013) emphasizes that academic supervision aims to enhance learning quality through interactions between school principals and educators. Mulyasa (2018) mentions that academic supervision includes systematic planning, direct observation, and objective feedback to improve teacher performance. The dimensions of academic supervision most relevant to this study refer to Mulyasa (2018), which include: (1) Planning: Developing supervision programs based on teachers' needs. (2) Implementation: Direct observation of learning activities in the classroom. (3) Evaluation and Feedback: Analyzing supervision results and providing recommendations for improving teacher performance.

Instructional leadership is the leadership style of school principals aimed at improving learning quality. Aslam (2022) defines instructional leadership as the principal's role in creating a conducive work environment to support learning effectiveness. According to Salam (2020), instructional leadership focuses on managing learning processes, including curriculum development, learning evaluation, and improving the quality of educators. Haryani (2022) emphasizes that instructional leadership encourages all school components to continuously improve education quality. The instructional leadership dimensions used in this study refer to Glickman (as cited in Priansa & Somad, 2014), which include: (1) Formulating Vision and Mission: The principal must have a clear vision for improving education quality. (2) Learning Management: Supervising the implementation of teaching methods used by educators. (3) Creating an Academic Climate: Encouraging a positive learning culture for both students and teachers. Work discipline refers to an individual's level of adherence to regulations and norms in the workplace. Uno (2016) states that teacher work discipline reflects the level of

compliance with professionalism standards in carrying out duties. Hasibuan (2017) defines work discipline as an individual's awareness of obeying applicable regulations and ethics within an organization. Wyckoff & Barbara (2016) emphasize that work discipline involves commitment to performing tasks consistently and responsibly. The most relevant dimensions of work discipline in this study refer to Agustini (2019), which include: (1) Attendance: Compliance with work schedules and a high attendance rate. (2) Task Execution: Consistency in teaching and timely completion of administrative tasks. (3) Work Ethics: Commitment to professionalism and responsibility in work.

2. RESEARCH METHOD

This study employs a quantitative approach with an explanatory research design. According to Sugiyono (2020), a quantitative approach is used to analyze the relationships between variables through numerical data collected from respondents. Explanatory research aims to explain the influence of academic supervision, instructional leadership, and work discipline on the quality of elementary schools in Dempet District, Demak Regency. This research was conducted in elementary schools in Dempet District, Demak Regency. The location was chosen based on the Education Report, which indicated that the quality of education in the area still needs improvement. The research was carried out from May to July 2024, covering data collection, analysis, and interpretation of results. The study design uses a survey method with regression analysis techniques. According to Creswell (2018), surveys allow researchers to collect large-scale data to identify relationships between variables. The instrument used is a questionnaire developed based on indicators determined through a literature review. The collected data was analyzed using an inferential statistical approach to test the research hypotheses.

The population in this study consists of all teachers and principals in elementary schools in Dempet District, Demak Regency. The sample was selected using a proportional stratified random sampling technique to ensure representation from various schools within the district. The sample size was calculated using Slovin's formula with a 5% margin of error, ensuring that the number of respondents remains representative of the study (Sugiyono, 2020). Before being used in the main study, the research instrument underwent validity and reliability testing. Validity was tested using Pearson Product Moment correlation analysis, which, according to Arikunto (2016), is used to measure the suitability of question items with the studied construct. Meanwhile, reliability was tested using Cronbach's Alpha technique. The test results indicated that all questionnaire items had correlation values above 0.30, signifying acceptable validity. Additionally, the Cronbach's Alpha values for all variables exceeded 0.70, indicating a high level of reliability for the research instrument (Ghozali, 2018).

The data collection technique in this study was conducted using a five-point Likert scale questionnaire. The questionnaire was used because it can objectively measure respondents' perceptions of the research variables (Sugiyono, 2020). Additionally, interviews with school principals were conducted to obtain further information on academic supervision and instructional leadership. Secondary data was gathered from school documents and Education Report records to strengthen the research analysis. The collected data was analyzed using descriptive and inferential statistical techniques. According to Ghozali (2018), descriptive analysis aims to provide an overview of data distribution, while inferential analysis employs multiple linear regression tests to determine the influence of academic supervision, instructional leadership, and work discipline on school quality. Before conducting regression analysis, classical assumption tests such as normality, multicollinearity, and heteroscedasticity were applied to ensure the validity of the research results (Gujarati, 2012).

3. RESULTS AND DISCUSSION

This study involved 151 teachers and school principals in Dempet District, Demak Regency, as respondents. The collected data covered the variables of Academic Supervision, Instructional Leadership, Work Discipline, and School Quality. Based on the survey results, Academic Supervision had an average score of 3.8 on a five-point Likert scale, indicating that it has been implemented fairly well, although certain aspects still require improvement. According to Mulyasa (2018), effective academic supervision enhances teacher professionalism and improves the quality of learning. Instructional Leadership obtained an average score of 3.9, suggesting that school principals have effectively fulfilled their roles in directing and guiding educators. This finding aligns with Glickman (as cited in Priansa & Somad, 2014), who states that strong instructional leadership contributes to a conducive academic environment and improved education quality. Teachers' Work Discipline received an average score of 3.7, reflecting that some teachers have not yet fully adhered to optimal discipline standards. This supports Uno (2016), who emphasizes that teacher discipline directly impacts learning effectiveness and student achievement. Meanwhile, School Quality had an average score of 3.6, indicating that continuous efforts are needed

to enhance the quality of education.

Before conducting regression analysis, prerequisite tests were performed, including normality, multicollinearity, and heteroscedasticity tests. The normality test using the Kolmogorov-Smirnov method yielded a significance value of 0.087, which is greater than 0.05, indicating that the data is normally distributed (Gujarati, 2012). The multicollinearity test was conducted by examining the Variance Inflation Factor (VIF) values, which were all below 10, confirming that there were no multicollinearity issues (Ghozali, 2018). The specific VIF values were 1.932 for Academic Supervision, 2.104 for Instructional Leadership, and 1.845 for Work Discipline. Meanwhile, the heteroscedasticity test using the Glejser method produced significance values above 0.05 for all variables, with Academic Supervision at 0.178, Instructional Leadership at 0.211, and Work Discipline at 0.154, indicating that heteroscedasticity was not detected in this research model.

The hypothesis test results using multiple linear regression analysis indicated that Academic Supervision significantly influences School Quality, with a significance value of 0.003 and a regression coefficient of 0.223. This suggests that an increase of one unit in Academic Supervision leads to a 22.3% improvement in School Quality. The Instructional Leadership of school principals also had a significant impact on School Quality, with a significance value of 0.002 and a regression coefficient of 0.740, showing that each one-unit increase in Instructional Leadership results in a 74% enhancement in School Quality. Teachers' Work Discipline also had a positive effect on School Quality, with a significance value of 0.005 and a regression coefficient of 0.406, indicating that an increase of one unit in Work Discipline leads to a 40.6% improvement in School Quality.

Additionally, the F-test results showed a significance value of 0.000 with an F-calculated value of 15.672, which is greater than the F-table value at a 5% significance level, confirming that all three independent variables collectively influence School Quality. The combined regression model of the three variables resulted in the following regression equation: $Y = 4.737 + 0.223X_1 + 0.740X_2 + 0.406X_3$, where Y represents School Quality, X_1 represents Academic Supervision, X_2 represents Instructional Leadership, and X_3 represents Work Discipline. The R Square value of 0.361 indicates that 36.1% of the variance in School Quality is explained by these three variables, while the remaining 63.9% is influenced by other factors not examined in this study (Ghozali, 2018).

Based on these findings, it can be concluded that Academic Supervision, Instructional Leadership, and Work Discipline play a crucial role in enhancing School Quality. Strengthening these three factors will significantly contribute to improving the education system, particularly in elementary schools in Dempet District, Demak Regency. Therefore, continuous efforts should be made to enhance academic supervision practices, develop stronger instructional leadership among school principals, and improve teachers' work discipline to ensure better educational outcomes.

The findings of this study demonstrate that Academic Supervision, Instructional Leadership, and Work Discipline significantly influence School Quality. Among these three variables, Instructional Leadership has the greatest impact, followed by Work Discipline and Academic Supervision. This emphasizes the crucial role of school principals in guiding and supporting teachers to enhance school quality. Academic Supervision in this study obtained an average score of 3.8, indicating that while it has been implemented fairly well, there are still aspects that require improvement. Regression analysis results show that Academic Supervision significantly influences School Quality, with a significance value of 0.003 and a regression coefficient of 0.223, meaning that a one-unit increase in Academic Supervision leads to a 22.3% improvement in School Quality. These findings are consistent with Mulyasa (2018), who asserts that effective and systematic academic supervision enhances teacher professionalism and improves learning quality. Supervision allows school principals to observe classroom instruction, provide constructive feedback, and mentor teachers to refine their teaching methods. However, the relatively low contribution of 22.3% suggests that the effectiveness of supervision may be limited due to insufficient follow-up mechanisms. To maximize its impact, principals should implement more structured and continuous supervision programs that include targeted mentoring, regular feedback sessions, and personalized improvement plans for teachers.

Instructional Leadership had the highest average score among the three variables at 3.9, indicating that school principals in Dempet District have effectively fulfilled their leadership roles in guiding teachers. Regression analysis reveals that Instructional Leadership has the strongest impact on School Quality, with a significance value of 0.002 and a regression coefficient of 0.740, meaning that a one-unit increase in Instructional Leadership results in a 74% improvement in School Quality. These results align with Glickman (as cited in Priansa & Somad, 2014), who emphasizes that strong instructional leadership creates a conducive academic environment and enhances education quality. Effective principals do more than

just administrative work—they actively participate in curriculum development, instructional planning, teacher training, and fostering a culture of innovation in teaching methods. The strong influence of Instructional Leadership (74%) suggests that principals play a central role in shaping school performance and student success. However, challenges such as a lack of leadership training, administrative workload, and resistance to instructional change may limit the effectiveness of school principals. To address this, targeted leadership development programs should be provided to strengthen principals' instructional leadership skills, ensuring that they can lead with vision and strategy to improve school quality.

Work Discipline among teachers received an average score of 3.7, indicating that while most teachers maintain professional discipline, some still struggle with punctuality, attendance, and completing administrative tasks. Regression results show that Work Discipline has a significant impact on School Quality, with a significance value of 0.005 and a regression coefficient of 0.406, meaning that a one-unit increase in Work Discipline leads to a 40.6% improvement in School Quality. These findings are consistent with Uno (2016), who highlights that teacher discipline directly affects classroom efficiency and student learning outcomes. Teachers with strong work discipline demonstrate better classroom management, higher student engagement, and improved academic achievement. However, inconsistencies in discipline such as irregular attendance, delayed task completion, and lack of involvement in school activities can negatively impact education quality. Schools should implement clear accountability measures, reward systems for disciplined teachers, and structured professional development programs to ensure teachers maintain high levels of discipline.

The combined effect of Academic Supervision, Instructional Leadership, and Work Discipline was also confirmed through the F-test, which showed a significance value of 0.000 with an F-calculated value of 15.672, exceeding the F-table value at a 5% significance level. The multiple regression equation derived from the study is: $Y = 4.737 + 0.223X_1 + 0.740X_2 + 0.406X_3$. The R Square value of 0.361 indicates that 36.1% of the variation in School Quality is explained by these three variables, while the remaining 63.9% is influenced by other factors not included in this study (Ghozali, 2018). This suggests that while Academic Supervision, Instructional Leadership, and Work Discipline are important for school improvement, other elements such as curriculum design, parental involvement, infrastructure, and government policies also play a crucial role.

Tabel 2. R Square Model Test Results

Model	R	R Square	Model Summary	
			Adjusted R Square	Std. Error of the Estimate
1	.601 ^a	.361	.348	23.74010

a. Predictors: (Constant), Work discipline, Academic supervision, Instructional leadership style

Source: Processed Data (2025)

Based on these findings, several recommendations can be made to further enhance school quality. First, Academic Supervision should be improved by implementing structured feedback mechanisms, providing personalized teacher mentoring, and ensuring follow-up actions after supervision. Second, School Principals should strengthen their Instructional Leadership by fostering a collaborative school culture, engaging in continuous leadership training, and actively participating in instructional planning. Third, teacher Work Discipline should be reinforced through well-defined policies, performance-based incentives, and professional development programs that emphasize accountability and time management. Additionally, the Education Office should implement policies that support school capacity building, ensuring that both principals and teachers receive the necessary resources and training to enhance their effectiveness. This study highlights that Academic Supervision, Instructional Leadership, and Work Discipline are crucial in improving School Quality. Among these, Instructional Leadership has the strongest influence (74%), followed by Work Discipline (40.6%), and Academic Supervision (22.3%). Together, these three variables explain 36.1% of the variation in School Quality, emphasizing the need for a comprehensive and multi-faceted approach to school improvement. If these factors are effectively enhanced and supported by appropriate educational policies and continuous professional development programs, school quality can be significantly improved, particularly in elementary schools in Dempet District, Demak.

4. CONCLUSION

This study reveals that academic supervision, instructional leadership, and work discipline have a significant impact on the quality of elementary schools in Dempet District, Demak Regency. Well-planned and continuous academic supervision has been proven to enhance teaching effectiveness and the professionalism of educators. Effective instructional leadership by

school principals plays a crucial role in creating a learning environment that supports academic development, ultimately improving education quality in schools. Additionally, a high level of teacher work discipline significantly contributes to ensuring the smooth implementation of the learning process and achieving optimal student learning outcomes. When applied synergistically, these three factors can improve school quality, as confirmed by regression analysis results, which demonstrate a significant positive relationship between these variables

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