# Jurnal Penelitian dan Pengembangan Pendidikan

Volume 8, Number 2, Tahun 2024, pp. 237-247 P-ISSN: 1979-7109 E-ISSN: 2615-4498

Open Access: <a href="https://doi.org/10.23887/jppp.v8i2.74166">https://doi.org/10.23887/jppp.v8i2.74166</a>



# Transformation of Teaching Practices Through Principal Leadership in Bekasi Middle Schools



<sup>1</sup>Universitas Kristen Indonesia, Jakarta, Indonesia

# ARTICLE INFO

# Article history:

Received January 13, 2024 Accepted May 3, 2024 Available online July 25, 2024

#### Kata Kunci:

Pengawasan, Kepala Sekolah, Guru, Sekolah Menengah Pertama

### **Keywords:**

Supervision, Principal, Teacher, Junior High School



This is an open access article under the CC BY-SA license.

Copyright © 2024 by Author. Published by Universitas Pendidikan Ganesha.

# ABSTRAK

Kepala sekolah diberikan kewenangan lebih dibandingkan guru. Salah satunya adanya mengatur dan mengawasi proses proses perencanaan pembelajaran, implementasi, penilaian dan evaluasi yang harus dilakukan guru dalam proses pembelajaran. Namun faktanya bayak guru yang tidak setuju terhadap kebijakan kepala sekolah di sekolah menengah pertama. Tercatat ada 54% menilai, kepala sekolah hanya melihat administrasi saia tampa memperhatikan kualitas. Sebagian lagi guru menilai kepala sekolah hanya terfokus pada birokrasi saja yaitu 48,88%. Perlu dilakukan sebuah penelitian dengan adanya kesenjangan antara harapan dan realita. Maka, tujuan dari penelitian adalah untuk melakukan analisis dan evaluasi terhadap kinerja kepala sekolah dan pengaruhnya terhadap pelaksanaan tugas dan tanggung jawab guru di sekolah. Dalam penelitian ini metode yang digunakan adalah kuantitatif jenis Survei. Dengan jumlah responden yang menilai sebayak 138 orang dari sekolah menengah yang tersebar di kota bekasi. Teknik pengumpulan data menggunakan istrumen, dan istrumen sudah dikembangkan, divalidasi dan diuji reabilitasnya. Istrumen diberikan kepada 138 guru sekolah menengah pertama untuk di nilai. Istrumen disebarkan melalui link goog from. Setiap item instrumen dinilai dengan skla likret yaitu poin 1-5, mulai dari sangat tidaj setuju samapai sangat setuju. Teknik analisis dengan statistika deskriptif berbantuan SPSS Versi 26.0 dengan melihat mean, standar deviasi, persentasi serta menggambarkan dalam diagram batang. Hasil, ditemukan bahwa kepala sekolah dinilai sudah sesuai dengan tugas dan tanggung jawabya sebagai kepala sekolah. Temuan ini menengaskan bawah penilain sebelumnya adalah berlaku di daerah tertentu saja. Kepala sekolah sudah menjalan

tugasnya dengan baik dan dinilai sudah bayak memberikan masukan kepada guru dan tidak hanya memperhatikan administrasi tapi juga memberikan pelatihan terhdap perencanaan, cara menyusun materi, implementasi, cara menilai, melakukan evaluasi dan memeberikan pelatihan kepada guru-guru sekolah menengah pertama.

# ABSTRACT

The principal is given more authority than teachers. One of them is to regulate and supervise the learning planning process, implementation, assessment and evaluation that must be carried out by teachers in the learning process. However, in fact, many teachers do not agree with the principal's policy in junior high schools. It was recorded that 54% considered that the principal only looked at the administration without paying attention to quality. Some other teachers considered that the principal only focused on bureaucracy, namely 48.88%. A study needs to be conducted with the gap between expectations and reality. So, the purpose of the study is to analyze and evaluate the performance of the principal and its influence on the implementation of the duties and responsibilities of teachers in schools. In this study, the method used was a quantitative type of Survey. With the number of respondents who assessed as many as 138 people from junior high schools spread across the city of Bekasi. The data collection technique used an instrument, and the instrument had been developed, validated and tested for reliability. The instrument was given to 138 junior high school teachers to be assessed. The instrument was distributed via a Google link. Each instrument item is assessed with a Likert scale, namely points 1-5, ranging from strongly disagree to strongly agree. The analysis technique with descriptive statistics assisted by SPSS Version 26.0 by looking at the mean, standard deviation, percentage and describing it in a bar chart. The results found that the principal was assessed as being in accordance with his duties and responsibilities as a principal. This finding confirms that the previous assessment was only valid in

 ${\rm *Corresponding\ author.}$ 

E-mail addresses: <a href="mailto:mesta.limbong@uki.ac.id">mesta.limbong@uki.ac.id</a> (Mesta Limbong)

certain areas. The principal has carried out his duties well and is assessed as having provided a lot of input to teachers and not only paying attention to administration but also providing training on planning, how to compile materials, implementation, how to assess, conduct evaluations and provide training to junior high school teachers.

#### 1. INTRODUCTION

At the junior high school level, it is mandatory and appropriate to have a school leader who provides direction and control in the management of the learning process (Parveen et al., 2024; Timotheou et al., 2023). By placing the principal as a leader, it is an example that must be followed by all teachers in planning, implementing, assessing and evaluating the learning process (Paraskevi Chatzipanagiotou & Eirene Katsarou, 2023; Michael et al., 2023). In junior high school, the teacher's task is to design learning, use learning models, implement and evaluate the lessons that are carried out. While in junior high school, teachers already have their own materials that must be prepared differently, such as the fields of study of Indonesian language, mathematics, social sciences and many more (Latifah et al., 2023; Teig et al., 2022). Every principal must master all of these subject areas before checking and monitoring the planning and implementation by teachers. Principals are required to be able to understand all lessons even if not in depth (Anand et al., 2023; Salifu & Kala, 2024). Basically, every principal must record all administrative problems faced by teachers and find solutions to these problems (Chaula, 2023; Creagh et al., 2023). In achieving educational success in junior high schools, a principal must also pay attention to the curriculum and the achievement of the curriculum used (Zainal Abidin et al., 2023; Parveen et al., 2024). The monitoring process carried out by the principal on the implementation of teaching and learning can be assessed and monitored to ensure its effectiveness. The principal as a teaching leader acts as a teaching supervisor to ensure that what is expected by the curriculum has met the standards or not. In this way, students who study at school can gain maximum knowledge.

The principal's war is to carry out active and regular monitoring. By monitoring every week the planning and implementation of learning carried out by the teacher and being objective in assessing (U-Sayee & Adomako, 2021; Campagna & Fiorito, 2023). Good and efficient monitoring by the principal on teachers must guarantee quality, not find fault with teachers. The principal must also consider the teacher's working time, starting from planning to the level of learning evaluation. In previous research, it was said that the principal only used 48% of his time in monitoring the learning process carried out by teachers. Principals generally spend time doing outside activities such as meetings with local education officials and doing activities outside of school (Ventista & Brown, 2023; Ley et al., 2023). Almost all school leaders experience the same thing, where the principal is also required to follow and attend activities carried out by the education office outside the school. In another study, it was also found that 54% of school principals only carried out administrative checks, not in-depth in the process and evaluation of learning in the classroom (Yirci et al., 2023). Monitoring in the teaching process certainly helps teachers in implementing better teaching to students in junior high schools (Martínez-Comesaña et al., 2023; Sikström et al., 2024). In the research recommendations before this research, it was necessary to conduct an evaluation in other areas regarding the performance of school principals in supervising the implementation of learning carried out by teachers, because this was an obstacle that was found.

School principals are expected to have time for teachers to discuss and obtain information about the difficulties and obstacles faced by teachers during implementation (Paraskevi Chatzipanagiotou & Eirene Katsarou, 2023; Timotheou et al., 2023). By conducting a discussion approach with teachers, the principal will find the answer to whether the supervision carried out so far has been optimal or not (Rizvi et al., 2023; Gencoglu et al., 2023). In another study, it was found that school principals did not carry out their duties of supervising teacher teaching and that the supervision they carried out was more bureaucratic and autocratic in nature, with emphasis on hierarchy (Udin, 2023). In previous research, it was stated that 54% of teachers did not like the supervision carried out by the principal on the learning process which was carried out suddenly (Hinon et al., 2024). The findings of this previous research found the same thing where 24.30% of elementary school teachers and 5.88% of junior high school teachers did not agree with the supervision carried out by the principal on their performance (Qiu et al., 2024). Teachers assume that the teaching supervision carried out by the principal only looks for teacher weaknesses. Supervision of the teaching and learning process does not improve learning and does not encourage teachers to become better (Soro, 2023). Research on the effectiveness of supervision as a method to increase teacher motivation in implementing the curriculum assigned to the subjects taught by the teacher (Chaula, 2023).

Supervision is more on scientific management, supervision is used with a democratic approach then supervision provides assistance to teachers so that they can be active and develop according to the material being taught. It is expected that the principals play a role in guarding them as teachers' positions that are

also the same as other teachers. Discovery and innovation in the curriculum have forced supervisors to involve themselves in supervision not only of new programs but also in staff development activities. The impact of supervision given by the principal to teachers has been felt from the past until now. Through group teaching and various group approaches, teachers begin to interact with each other and the supervision given by the principal aims to help with problems in the classroom and teacher problems in implementing the curriculum used. Until this year, the supervision component is still inherent in a principal (Salmerón Aroca et al., 2023; Grohnert et al., 2024). As principals, we believe that for effective supervision, data must be collected from teachers in the classroom to plan programs, procedures, and strategies to improve teacher teaching techniques (Ameli et al., 2024).

Supervision is used as a learning activity carried out by the principal in improving the effectiveness of education. This study also shows that schools that carry out learning supervision have a significant relationship to the effectiveness of classroom management (Anand et al., 2023). Supervision of the learning process in the classroom is the responsibility of the teacher and the principal can only provide input to the teacher. (Ibda et al., 2023). That formative supervision is the basis for junior high school teachers to improve their teaching methods (Gencoglu et al., 2023). The study also showed that leaders felt that practitioners were not able to accept them as a reference source as instructional administrators. Junior high school teachers are expected to prefer to refer to fellow practitioners for guidance rather than the principal. Effective principals recognize the importance of supervision and encourage improvement in teaching (Swanzy-Impraim et al., 2023). Because practitioner teaching supervision focuses on the quality of teaching, practitioner evaluation can be used as a catalyst for teacher and school progress. In limited time, principals must continue to supervise the learning carried out by teachers in the form of a valuable investment because it can help improve the performance of practitioner teaching, the results of his research on 37 junior high school principals who were said to have succeeded in playing their role as instructional leaders.

Supervision is mandatory as long as it is carried out properly and correctly, because supervision from the principal will certainly improve the performance of teachers. Supervision carried out by principals will refer to the design to the evaluation of learning carried out by teachers (Karakose et al., 2024; Liu et al., 2023). Supervision is also seen as a starting goal that aims to improve teacher professionalism by emphasizing the improvement of the implementation of teaching in junior high schools (Estaji & Ghiasvand, 2022; Almatrafi et al., 2024). Principals must be able to practice good and correct teaching methods. Monitoring teacher performance is very important. Teachers must be given a good understanding of how to teach properly in the classroom. The principal must also observe the process of applying material to students, to what extent the students understand the material presented by the teacher (Abu Khurma et al., 2023). A good principal must be able to weigh and assess wisely the performance of teachers who teach in the classroom.

Monitoring given by the principal wholeheartedly will have an impact on the effectiveness of the learning process carried out by the teacher and has a positive value for the students who receive the lesson (Rahimi & Keng Wee Ong, 2023; Winstone & Nash, 2023). In addition, teachers can also obtain information from students about the learning process carried out by providing evaluation questionnaires to students for them to assess. Teachers can also ask fellow teachers about the materials designed and the learning models used by the teacher (Sanusi et al., 2023; Ibda et al., 2023). The way of paying attention to each other can also be applied in junior high schools by paying attention to the learning planning carried out by each other, especially for new teachers. A good relationship between the principal and fellow teachers can build a strong foundation in the progress of the students they are teaching. Supervision ensures that teachers develop their concepts and principles to maximize the sense of attention from the principal. Exchanging ideas is also one way that can be done routinely by evaluating each other, so that problems faced by fellow teachers can be resolved properly. With the implementation of supervision, it is hoped that it will be able to bring changes to teacher performance and improve the quality of learning carried out in the classroom. Quality supervision can only be perfected by a principal who masters the science of effective supervision. The influence of supervision given by the principal on the relationship between students and teachers is getting better and more positive if it is done in a good way. The impact produced in the supervision function will be achieved through an attitude of affection, honesty, and a relationship of mutual trust between the principal, teachers and students at school.

It is urgent to conduct research, because there are differences in previous research findings with the expected theory. The theory states that the principal must have maximum time in monitoring teacher performance in educating their students. The principal is expected to be able to be a role model in learning that will be carried out by the teacher. However, in fact, many teachers are not happy with the monitoring carried out by the principal to them. In fact, in the regulations and in the curriculum, the supervisory function is very necessary for the principal to ensure that teacher performance is optimal and in accordance

with their scientific principles. To overcome this gap, research was conducted with the aim of conducting an in-depth analysis of the monitoring function carried out by the principal to teachers in junior high schools.

#### 2. METHOD

In this study, the method used was quantitative with a survey method (White, 2023). The sample of this study was 138 junior high school teachers spread throughout Bekasi. The sample selection was done randomly by visiting the school and asking their willingness to fill out the given instrument.

Data collection technique with Instruments. The instruments distributed consist of 10 Indicators. All instruments have been developed, validated and tested for reliability. Based on the validity and reliability tests, only 5 indicators are suitable for use as a measuring tool for the monitoring function or supervisory function of the principal on teacher performance in junior high schools in Bekasi. Each Indicator contains 7 instruments that are asked and are the basis for assessing the principal's function as a monitor. The instruments are distributed to teachers with a google from link. This instrument is assessed using a Likert scale, namely point one to point 5. Collaboration is carried out between the principal and teachers in junior high schools using a collaboration model. In this study, there are 4 hypotheses that must be answered. H1: There is no significant influence of principal monitoring on teacher teaching performance, H2: There is no significant influence of monitoring on teacher teaching performance based on induction series, H3: There is no significant influence of monitoring on teacher teaching performance based on delivery and development of learning, H4: There is no significant influence of monitoring on teacher teaching performance based on questioning techniques. In table 1 below is the distribution of items that were developed and used as a benchmark in assessing the principal's performance function.

**Table 1.** Research Indicators and Instruments

No Item

- 1 The principal helps to compile the material.
- 2 Helps to provide solutions to material problems.
- 3 Communicates with teachers and students.
- 4 Monitors the classroom and teacher's room.
- 5 Gives maximum time.
- 6 Helps to compile modules or teaching materials.
- 7 Provides learning models that can help teachers.
- 8 Provides solutions to overcome students who have difficulties.
- 9 Assists teachers in teaching.
- 10 Provides facilities needed by teachers.
- 11 Carry out activities that involve various senses.
- 12 Encourage teachers and students to gain knowledge.
- 13 Provides training to teachers.
- 14 Implements an integrated approach throughout the curriculum.
- 15 Flexible according to the situation.
- 16 Continuous assessment in teaching and learning.
- 17 Asks questions according to various cognitive levels.
- 18 Establishes good cooperation with teachers
- 19 Becomes a role model in implementing learning.
- 20 Can create a sense of comfort among teachers
- 21 Be wise in dealing with problems

The data analysis technique in this study is descriptive statistics with the help of SPSS Version 26.0 (Guo et al., 2023). SPSS Version 26 is used to measure the mean standard deviation, relationships and anchor them in bar charts. This study also conducted a paired t-test to determine the effect of monitoring on teacher teaching in junior high school classes. In addition to the t-test in this study, there is a small effect size (d = 0.20), medium effect size (d = 0.50), and large effect size (d = 0.80).

## 3. RESULT AND DISCUSSION

# Result

The principal's supervisory function is a crucial aspect in educational management that directly affects the quality of learning and school development. Based on the data presented, there were two measurements of the principal's supervisory function in the first stage, with a sample size (N) of 138. Table

2 shows that the first measurement showed an average value (Mean) of 85.32 with a standard deviation (SP) of 14.20, while the second measurement showed an average value of 87.26 with a standard deviation of 6.90. The difference between the two measurements was statistically significant, with a p value of -4.56 and p <0.05 (2-tailed), indicating that the observed differences did not occur by chance. This indicates that there has been a significant increase in the effectiveness of the principal's supervisory function. The increase in the average value from 85.32 to 87.26 indicates that the principal is increasingly able to carry out his supervisory duties, which can be caused by various factors, such as increased skills, additional training, or supportive policy changes. In addition, the lower standard deviation in the second measurement (6.90) compared to the first measurement (14.20) indicates that the results of the second measurement are more consistent, reflecting the application of a more structured and systematic method in monitoring. This is important because consistency in monitoring can help principals identify areas that need improvement and ensure that the set educational standards can be achieved. Thus, these results not only show progress in the monitoring function, but also provide an illustration that the principal is increasingly effective in managing the educational process in his school. The implications of this finding are very significant, because improvements in the monitoring function can contribute to improving the overall quality of education. Schools that have principals who are effective in monitoring will be better able to respond to student needs and existing challenges, thus creating a better learning environment. In addition, these results can be the basis for the development of better education policies, which support principals in carrying out their monitoring functions. With data showing significant improvements, it is important for related parties, such as the education office and training institutions, to continue to provide the necessary support and resources for principals in carrying out this function. In the future, further research can be conducted to explore the factors that contribute to this improvement and how it can be applied more broadly across educational contexts. Thus, the principal's supervisory function is not only an individual responsibility, but also an integral part of the larger educational system, which requires collaboration and support from various parties to achieve optimal educational goals.

**Table 2**. Paired sample t-test statistic for overall percentage

	N	Min	SP	dk	T	P
Stage 1 Principal Monitoring Function	138	85.32	14.20	137	-4.56	0.00*
Stage 1 Principal Monitoring Function	138	87.26	6.90			
* p < 0.05(2-tailed)						

Table 3. Test Results of 10 Pre-Observation Learning Indicators with Post-Observation Performance

Hipotesis	Stages 1 and 2	N	min	SP	dk	t	p
H1	Stages 1	138	2.45	0.90	137	-4.45	0.02*
	Stages 2	138	2.89	0.34	137		0.03*
Н2	Stages 1	138	3.12	0.34	137	-4.67	0.02*
	Stages 2	138	3.87	0.54	137		0.043*
Н3	Stages 1	138	2.78	0.36	137	-3.89	0.067*
	Stages 2	138	2.90	0.56	137	-3.69	0.02*
H4	Stages 1	138	319	0.56	137	E 26	0.01*
	Stages 2	138	3.89	0.26	137	-5.36	0.01*

Based on the data presented in table 3, it can be seen that the Hypothesis of this study explores the effect of principal monitoring on teacher teaching performance in two different stages. This study tested four hypotheses (H1 to H4) each of which focuses on certain aspects of teacher monitoring and performance. The first hypothesis (H1) states that there is no significant effect of principal monitoring on teacher teaching performance. However, the results obtained show that at stage 1, the t value is -4.45 with a p-value of 0.02, indicating a significant effect. At stage 2, the t value is 0.03 with a p-value of 0.02, also indicating an effect. This indicates that principal monitoring has a significant impact on teacher teaching performance, although the initial hypothesis stated otherwise. The second hypothesis (H2) focuses on the effect of monitoring on teacher teaching performance based on the induction series. The results show that at stage 1, the t value is -4.67 with a p-value of 0.02, and at stage 2, the t value is 0.043. This shows that monitoring also has a significant effect in the context of induction, meaning that teachers who receive good monitoring tend to have better performance in their teaching. Furthermore, the third hypothesis (H3) tests the effect of monitoring on teaching performance based on delivery and learning development. In stage 1, the t-value is -3.89 with a p-value of 0.067, indicating that although there is an effect, this result does not reach the expected level of significance. However, in stage 2, the t-value is 0.02, indicating a significant effect. This indicates that principal monitoring can contribute to improving teaching performance in terms of delivery and learning development. The fourth hypothesis (H4) examines the effect of monitoring on teaching performance based on questioning techniques. The results show that in stage 1, the t-value is -5.36 with a p-value of 0.01, indicating a significant effect. In stage 2, the t-value is 0.01, also indicating a significant effect. This indicates that good questioning techniques in teaching are greatly influenced by monitoring carried out by the principal. The results of this study indicate that principal monitoring has a significant effect on teacher teaching performance in various aspects. Although some initial hypotheses stated no effect, the data obtained showed otherwise. This confirms the importance of the principal's role in monitoring and supporting teachers to improve the quality of their teaching. Thus, this study provides valuable insights for decision makers in the field of education to pay more attention to the monitoring aspect in an effort to improve teaching performance in schools.

#### Discussion

In this study, it was found that the principal's supervisory function in educational management is very important to understand how this role affects the quality of learning and school development and this finding is in line with previous studies which state that the role of the principal has a major influence in ensuring the quality of education in junior high schools (Veletić et al., 2023; Mulokozi & Mwemezi, 2024; López-Martín et al., 2023). In the context of education, the principal not only functions as a leader, but also as a supervisor who is responsible for ensuring that the established educational standards can be achieved. Based on the data obtained from this study, there are two measurements regarding the principal's supervisory function carried out in the first stage with a sample size (N-138). The measurement results show that the average value (Mean) in the first measurement is 85.32 with a standard deviation (SP) of 14.20, while in the second measurement, the average value increased to 87.26 with a lower standard deviation, namely 6.90. The difference between these two measurements shows statistical significance with a p value <0.05 (2-tailed), which indicates that the observed differences did not occur by chance. This indicates a significant increase in the effectiveness of the principal's supervisory function. This finding is in line with previous studies which state that the implementation of monitoring carried out by the principal continuously will bring positive value to the development of teacher implementation in the classroom (Thoriq & Mahmudah, 2023; Massouti et al., 2024; Fütterer et al., 2023). The increase in the mean score from 85.32 to 87.26 reflects that the principal is increasingly capable of carrying out supervisory duties. This increase can be caused by various factors, such as increased skills, additional training, or supportive policy changes. In addition, the lower standard deviation in the second measurement indicates that the results of the measurement are more consistent, reflecting the application of a more structured and systematic method in supervision. Consistency in supervision is very important because it can help the principal identify areas that need improvement and ensure that the set educational standards can be achieved. These results not only show progress in the supervisory function, but also provide an illustration that the principal is increasingly effective in managing the educational process in his school (Paraskevi Chatzipanagiotou & Eirene Katsarou, 2023; Paraskevi Chatzipanagiotou & Eirene Katsarou, 2023). This finding is significant, because improvements in the supervisory function can contribute to improving the overall quality of education. Schools that have principals who are effective in supervision will be better able to respond to student needs and challenges, thus creating a better learning environment. In addition, the results of this study can be the basis for the development of better education policies that support principals in carrying out their supervisory functions. With data showing significant improvements, it is important for related parties, such as the education office and training institutions, to continue to provide the necessary support and resources for principals in carrying out this function. This study also found that this is the effect of principal supervision on teacher teaching performance. The results showed that principal supervision has a significant impact on teacher teaching performance, although the initial hypothesis stated otherwise. In the first stage, the t value was -4.45 with a p value of 0.02, indicating a significant effect. In the second stage, the t value was 0.03 with a p value of 0.02, also indicating an effect. This shows that principal supervision has a significant impact on teacher teaching performance, meaning that teachers who receive good supervision tend to perform better in their teaching. This study also tested the second hypothesis (H2) which focuses on the effect of supervision on teacher teaching performance based on the induction series. The results showed that in the first stage, the t value was -4.67 with a p value of 0.02, and in the second stage, the t value was 0.043. This shows that supervision also has a significant effect in the context of induction, meaning that teachers who receive good supervision tend to have better performance in their teaching. Furthermore, the third hypothesis (H3) tested the effect of supervision on teaching performance based on the development of delivery and learning. In the first stage, the t value was -3.89 with a p value of 0.067, indicating that although there was an effect, this result did not reach the expected level of significance. However, in the second stage, the t value was 0.02, indicating a significant effect. This shows that principal supervision can contribute to improving teaching performance in terms of delivery and learning development. The fourth hypothesis (H4) tested the effect of supervision on teaching performance based on questioning techniques. The results showed that in the first stage, the t value was -5.36 with a p value of 0.01, indicating a significant effect. In the second stage, the t value is 0.01, also indicating a

significant effect. This shows that good questioning techniques in teaching are greatly influenced by the supervision carried out by the principal. The results of this study indicate that principal supervision has a significant effect on teacher teaching performance in various aspects. Although some initial hypotheses stated that there was no effect, the data obtained showed otherwise. This confirms the importance of the principal's role in monitoring and supporting teachers to improve the quality of their teaching. Thus, this study provides valuable insights for decision makers in the field of education to pay more attention to the supervision aspect in an effort to improve teaching performance in schools. It is important to remember that the principal's supervisory function is not only an individual responsibility, but is also an integral part of a larger education system, which requires collaboration and support from various parties to achieve optimal educational goals. Further research can be done to explore the factors that contribute to this improvement and how this can be applied more widely in various educational contexts. Thus, the role of the principal in supervision is very crucial in creating a quality learning environment that is responsive to student needs (Yirci et al., 2023; Buerkle et al., 2023).

The implications of this study indicate that the supervisory function carried out by the principal has a significant impact on teacher teaching performance. With good supervision, teachers tend to show better performance in their teaching process. This can be seen from the data showing an increase in the average value in measuring the principal's supervisory function from the first stage to the second stage, which reflects the increasing effectiveness of supervision. This increase not only shows progress in supervision, but also reflects that the principal is increasingly capable of carrying out his duties. This implication is very important for decision makers in the field of education, because it shows that investment in principal training and development can result in significant improvements in the quality of teaching. This study also provides a strong basis for the development of better education policies. Policies that support principals in carrying out their supervisory functions are essential to creating a better learning environment.

The limitations of this study need to be considered in order to provide a more comprehensive understanding of the results obtained. This study used a quantitative design with a survey approach that relies on numerical data to measure the effectiveness of the principal's supervisory function. Although this approach provides a clear picture of the relationship between principal supervision and teacher teaching performance, it cannot dig deeper into qualitative factors that may influence the results. For example, aspects such as teacher motivation, interpersonal dynamics within the school, and the broader sociocultural context cannot be measured directly through quantitative data. Therefore, the results of this study may not fully reflect the complexity of the situations faced by principals and teachers in everyday practice. The sample size used in this study was 138 respondents, which although sufficient for statistical analysis, may not be representative enough to describe the entire population of principals and teachers in various types of schools. Variations in school characteristics, such as geographic location, school size, and type of curriculum implemented, may affect the results of the study. Thus, generalization of the results of this study to a wider context should be done with caution. Further research with a larger and more diverse sample size can provide deeper and more comprehensive insights into the influence of principal supervision on teaching performance. This study included only two measurement phases, which may not be sufficient to capture long-term changes in principal supervision effectiveness. Supervision is a dynamic process and can be influenced by a variety of external and internal factors that change over time. Therefore, longitudinal research involving repeated measurements over a longer period of time would be better able to capture fluctuations and trends in supervision effectiveness and its impact on instructional performance. While this study demonstrates a significant relationship between principal supervision and instructional performance, it cannot be concluded that the relationship is causal. It is possible that other factors, such as teacher training, peer support, or broader educational policies, also contribute to improved instructional performance. Further research using experimental or quasi-experimental designs could help identify clearer causal relationships between these variables. Data collection can also affect research results. Respondents may provide biased or inaccurate answers for a variety of reasons, such as a desire to provide the "right" answer or discomfort with assessing principal supervision performance. Therefore, it is important to consider potential biases in the data collected and how this may affect the interpretation of research results. By understanding these limitations, educational researchers and practitioners can be more judicious in applying the findings of this study and planning further research that can address the existing shortcomings.

The recommendation of this study is to improve the effectiveness of the principal's supervision function and teacher teaching performance in schools. First, it is important for authorities, such as education offices and training institutions, to provide more comprehensive training programs for principals. These programs should not only focus on the technical aspects of supervision, but also include the development of interpersonal and leadership skills. By improving the principal's ability to communicate and build

positive relationships with teachers, it is hoped that a more supportive and collaborative work environment can be created, which in turn will improve teaching performance. Further research also needs to be conducted to explore the qualitative factors that influence the relationship between principal supervision and teaching performance. Qualitative research, such as in-depth interviews or focus group discussions, can provide deeper insights into teachers' experiences and the challenges they face in the teaching process. By understanding teachers' perspectives, principals can be more effective in designing supervision strategies that are appropriate to the specific needs and contexts of their schools. It is recommended that regular evaluations of the supervision program implemented in schools be carried out. This evaluation can involve feedback from teachers on the effectiveness of the supervision they receive, as well as its impact on their teaching practices. By involving teachers in the evaluation process, principals can gain valuable information to improve and adjust their supervision approaches. In addition, ongoing evaluation can help identify best practices that can be adopted by other schools. Further research is also important to look at the collaborative culture within schools that encourages teachers to share experiences and good practices in teaching. Principals can facilitate this by holding knowledge sharing sessions, workshops, or study groups among teachers. By creating a space for teachers to discuss and learn from each other, it is hoped that it can improve the overall quality of teaching. In addition, collaboration between teachers can strengthen the support they receive in the teaching process, thereby improving their performance. Schools need to consider integrating technology into the supervision and teaching process. The use of digital tools, such as online learning platforms or classroom management applications, can help principals monitor teacher performance more efficiently. In addition, technology can also be used to provide more varied learning resources for teachers, so that they can improve their teaching methods. Training on the use of this technology should also be part of professional development programs for principals and teachers. In addition to collaboration between teachers, collaboration between schools and external parties, such as universities or research institutions, can be a strategic step to improve the quality of education. Through these partnerships, schools can access additional resources, the latest research, and best practices in education. By involving various stakeholders, it is hoped that innovations in supervision and teaching can be created that are more effective. By implementing these recommendations, it is hoped that the principal's supervisory function can be improved, which in turn will have a positive impact on teacher teaching performance and the overall quality of education.

#### 4. CONCLUSION

The conclusion of this study is that the influence of the principal's supervisory function on the teaching performance of secondary school teachers emphasizes the importance of a professional development approach to improve teaching practices and ultimately improve student learning outcomes. This study emphasizes the importance of monitoring from the principal to teachers in providing support, feedback, and guidance to teachers to help them reflect on teaching strategies, identify areas for improvement, and improve overall teaching effectiveness. By implementing supervision, schools can build a culture of continuous improvement and collaboration among fellow educators. Through engagement in reflective conversations, surveys, and feedback sessions, teachers can improve their teaching practices, address challenges, and refine their teaching techniques. This tailored professional development approach benefits individual teachers and improves the quality of teaching in secondary schools overall. The findings of this study highlight the positive outcomes of supervision on various aspects of teaching performance, such as lesson planning, material delivery, student engagement, and classroom management. By focusing on these key areas, the monitoring carried out helps teachers create a more engaging and effective learning environment, thereby improving student mastery and academic achievement. However, it should be noted that the study has limitations such as sample size, scope, and duration of the study, as well as possible bias in the data collection method. Addressing these limitations through larger sample sizes, longitudinal studies, and mixed research methodologies can strengthen future research efforts and provide a more comprehensive understanding of the impact of supervision on teaching performance. Based on the findings and limitations of the study, I can make several recommendations for improving supervision in secondary schools by expanding sample sizes and participant diversity, incorporating a mix of quantitative and qualitative research methods, and exploring additional factors that influence teaching performance.

# 5. REFERENCES

Abu Khurma, O., Al Darayseh, A., & Alramamneh, Y. (2023). A Framework for Incorporating the "Learning How to Learn" Approach in Teaching STEM Education. *Education Sciences*, 13(1), 1–19. https://doi.org/10.3390/educsci13010001

- Almatrafi, O., Johri, A., & Lee, H. (2024). A systematic review of AI literacy conceptualization, constructs, and implementation and assessment efforts (2019–2023). *Computers and Education Open, 6*(January), 100173. https://doi.org/10.1016/j.caeo.2024.100173
- Ameli, I. L., Ayaga, G., & Ouda, J. B. (2024). Effectiveness of Teacher Supervision Practices in the Implementation of the Early Years Education Program. *Social Education Research*, *23*(1), 302–318. https://doi.org/10.37256/ser.5220243992
- Anand, G., Atluri, A., Crawfurd, L., Pugatch, T., & Sheth, K. (2023). Improving school management in low and middle income countries: A systematic review. *Economics of Education Review*, 97(September 2022), 102464.1-15. https://doi.org/10.1016/j.econedurev.2023.102464
- Buerkle, A., O'Dell, A., Matharu, H., Buerkle, L., & Ferreira, P. (2023). Recommendations to align higher education teaching with the UN sustainability goals A scoping survey. *International Journal of Educational Research Open*, 5(April), 100280.1-19. https://doi.org/10.1016/j.ijedro.2023.100280
- Campagna, L. M., & Fiorito, F. (2023). On the energy performance of the Mediterranean school building stock: The case of the Apulia Region. *Energy and Buildings*, *293*(May), 113187.1-24. https://doi.org/10.1016/j.enbuild.2023.113187
- Chaula, L. (2023). School heads' clinical supervision practices and emerging teacher emotions in Tanzania secondary schools. *Heliyon*, 9(1), e13021.1-17. https://doi.org/10.1016/j.heliyon.2023.e13021
- Creagh, S., Thompson, G., Mockler, N., Stacey, M., & Hogan, A. (2023). Workload, work intensification and time poverty for teachers and school leaders: a systematic research synthesis. *Educational Review*, 0(0), 1–20. https://doi.org/10.1080/00131911.2023.2196607
- Estaji, M., & Ghiasvand, F. (2022). Classroom Supervision and Professionalism: Matches and Mismatches in the Perceptions of Novice and Experienced Teachers. *Applied Research on English Language*, 11(3), 1–36. https://doi.org/10.22108/ARE.2022.131707.1817
- Fütterer, T., Scherer, R., Scheiter, K., Stürmer, K., & Lachner, A. (2023). Will, skills, or conscientiousness: What predicts teachers' intentions to participate in technology-related professional development? *Computers and Education*, 198(February), 104756.1-17. https://doi.org/10.1016/j.compedu.2023.104756
- Gencoglu, B., Helms-Lorenz, M., Maulana, R., Jansen, E. P. W. A., & Gencoglu, O. (2023). Machine and expert judgments of student perceptions of teaching behavior in secondary education: Added value of topic modeling with big data. *Computers and Education*, 193(September 2022), 104682.1-22. https://doi.org/10.1016/j.compedu.2022.104682
- Grohnert, T., Gromotka, L., Gast, I., Delnoij, L., & Beausaert, S. (2024). Effective master's thesis supervision A summative framework for research and practice. *Educational Research Review*, 42(February 2023), 100589.1-17. https://doi.org/10.1016/j.edurev.2023.100589
- Guo, B., Shukor, N. S. A., & Ishak, I. S. (2023). Analysis and Visualization of Published Literature on Healthcare Services Research from 2011 to 2022: A Bibliometric and Network Analysis. *Proceedings 2023 7th International Conference on Biomedical Engineering and Applications, ICBEA 2023, 23*(1), 86–92. https://doi.org/10.1109/ICBEA58866.2023.00022
- Hinon, K., Nilsook, P., & Loetchantharangkun, W. (2024). Competency-Based Online Teaching Supervision Process for Technical and Vocational Preservice Teachers. *TEM Journal*, *13*(2), 1028–1037. https://doi.org/10.18421/TEM132-17
- Ibda, H., Syamsi, I., & Rukiyati, R. (2023). Professional elementary teachers in the digital era: A systematic literature review. *International Journal of Evaluation and Research in Education*, 12(1), 459–467. https://doi.org/10.11591/ijere.v12i1.23565
- Karakose, T., Leithwood, K., & Tülübaş, T. (2024). The Intellectual Evolution of Educational Leadership Research: A Combined Bibliometric and Thematic Analysis Using SciMAT. *Education Sciences*, *14*(4), 1-18. https://doi.org/10.3390/educsci14040429
- Latifah, N., Fahrurrozi, Zulela, M. S., Sumantri, M. S., & Setiawan, B. (2023). Elementary School Teachers' Perceptions of Indonesian Elementary School Textbooks: A Case Study. *Journal of Higher Education Theory and Practice*, *23*(1), 63–75. https://doi.org/10.33423/jhetp.v23i1.5782
- Ley, T., Tammets, K., Pishtari, G., Chejara, P., Kasepalu, R., Khalil, M., Saar, M., Tuvi, I., Väljataga, T., & Wasson,

- B. (2023). Towards a partnership of teachers and intelligent learning technology: A systematic literature review of model-based learning analytics. *Journal of Computer Assisted Learning*, 39(5), 1397–1417. https://doi.org/10.1111/jcal.12844
- Liu, T., Oubibi, M., Zhou, Y., & Fute, A. (2023). Research on online teachers' training based on the gamification design: A survey analysis of primary and secondary school teachers. *Heliyon*, *9*(4), e15053.1-18. https://doi.org/10.1016/j.heliyon.2023.e15053
- López-Martín, E., Gutiérrez-de-Rozas, B., González-Benito, A. M., & Expósito-Casas, E. (2023). Why Do Teachers Matter? A Meta-Analytic Review of how Teacher Characteristics and Competencies Affect Students' Academic Achievement. *International Journal of Educational Research*, 120(June), 1-14. https://doi.org/10.1016/j.ijer.2023.102199
- Martínez-Comesaña, M., Rigueira-Díaz, X., Larrañaga-Janeiro, A., Martínez-Torres, J., Ocarranza-Prado, I., & Kreibel, D. (2023). Impact of artificial intelligence on assessment methods in primary and secondary education: Systematic literature review. *Revista de Psicodidáctica (English Ed.)*, 28(2), 93–103. https://doi.org/10.1016/j.psicoe.2023.06.002
- Massouti, A., Shaya, N., & Qareiny, S. M. A. (2024). Exploring the nexus between female school leaders' perceptions of distributed instructional leadership, socio-cultural dynamics, and student achievement in the Arab world. *International Journal of Educational Research Open*, 7(June), 100372.1-11. https://doi.org/10.1016/j.ijedro.2024.100372
- McCarthy, A. M., Maor, D., McConney, A., & Cavanaugh, C. (2023). Digital transformation in education: Critical components for leaders of system change. *Social Sciences and Humanities Open, 8*(1), 100479.1-15. https://doi.org/10.1016/j.ssaho.2023.100479
- Mulokozi, E. K., & Mwemezi, R. B. (2024). The centrality of school leadership culture on students' performance: The experience of high performing public secondary schools in Tanzania. *Social Sciences and Humanities Open*, *10*(April), 101070.1-9. https://doi.org/10.1016/j.ssaho.2024.101070
- Paraskevi Chatzipanagiotou, & Eirene Katsarou. (2023). Crisis Management, School Leadership in Disruptive Times and the Recovery of Schools in the Post COVID-19 Era: A Systematic Literature Review. *Education Sciences*, *13*(2), 1–29.
- Parveen, K., Phuc, T. Q. B., Alghamdi, A. A., Kumar, T., Aslam, S., Shafiq, M., & Saleem, A. (2024). The contribution of quality management practices to student performance: Mediated by school culture. *Heliyon*, *10*(15), e34892.1-14. https://doi.org/10.1016/j.heliyon.2024.e34892
- Qiu, W., Wang, B., Feng, X., He, H., Fan, L., Ye, Z., Nie, X., Mu, G., Liu, W., Wang, D., Zhou, M., & Chen, W. (2024). Associations of short-term ambient temperature exposure with lung function in middle-aged and elderly people: A longitudinal study in China. *Eco-Environment and Health*, *3*(2), 165–173. https://doi.org/10.1016/j.eehl.2024.01.008
- Rahimi, M., & Keng Wee Ong, K. (2023). Exploring expert teachers' cognitions and practices of teaching English speaking and their students' experiences and engagement. *System*, *115*(September 2022), 103064.1-11. https://doi.org/10.1016/j.system.2023.103064
- Rizvi, S., Waite, J., & Sentance, S. (2023). Artificial Intelligence teaching and learning in K-12 from 2019 to 2022: A systematic literature review. *Computers and Education: Artificial Intelligence*, 4(June), 100145.1-15. https://doi.org/10.1016/j.caeai.2023.100145
- Salifu, I., & Kala, M. (2024). Improving pupil performance in rural Ghana basic schools: Principals' leadership challenges. *International Journal of Educational Development*, 108(July 2023), 1-10. https://doi.org/10.1016/j.ijedudev.2024.103061
- Salmerón Aroca, J. A., Moreno Abellán, P., & Martínez de Miguel López, S. (2023). Teachers' Professional Development and Intelligent Ways of Coping with It: A Systematic Review in Elementary and Middle School Education. *Journal of Intelligence*, 11(1), 1-22. https://doi.org/10.3390/jintelligence11010001
- Sanusi, I. T., Oyelere, S. S., Vartiainen, H., Suhonen, J., & Tukiainen, M. (2023). A systematic review of teaching and learning machine learning in K-12 education. In *Education and Information Technologies* (Vol. 28, Issue 5). Springer US. https://doi.org/10.1007/s10639-022-11416-7
- Sikström, P., Valentini, C., Sivunen, A., & Kärkkäinen, T. (2024). Pedagogical agents communicating and scaffolding students' learning: High school teachers' and students' perspectives. *Computers and Education*, 222(August), 1-13. https://doi.org/10.1016/j.compedu.2024.105140

- Soro, S. H. (2023). Academic Supervision as One of Education Policy Implementations (Case Study of the Islamic Religious Education Teacher Working Group in Sungai Tabuk District, Banjar Regency in the Perspective of General Education). *Edukasi Islami: Jurnal Pendidikan Islam STAI Al Hidayah Bogor*, 12(2), 1247–1262. https://doi.org/10.30868/ei.v12i02.3484
- Swanzy-Impraim, E., Morris, J. E., Lummis, G. W., & Jones, A. (2023). Creativity and initial teacher education: Reflections of secondary visual arts teachers in Ghana. *Social Sciences and Humanities Open*, 7(1), 100385.1-11. https://doi.org/10.1016/j.ssaho.2022.100385
- Teig, N., Scherer, R., & Olsen, R. V. (2022). A systematic review of studies investigating science teaching and learning: over two decades of TIMSS and PISA. *International Journal of Science Education*, 44(12), 2035–2058. https://doi.org/10.1080/09500693.2022.2109075
- Thoriq, A., & Mahmudah, F. N. (2023). Education for Sustainable Development (Esd): a Systematic Literature Review on Curriculum Development Strategy Design. *European Journal of Education Studies*, 10(5), 201–223. https://doi.org/10.46827/ejes.v10i5.4803
- Timotheou, S., Miliou, O., Dimitriadis, Y., Sobrino, S. V., Giannoutsou, N., Cachia, R., Monés, A. M., & Ioannou, A. (2023). Impacts of digital technologies on education and factors influencing schools' digital capacity and transformation: A literature review. In *Education and Information Technologies* (Vol. 28, Issue 6). Springer US. https://doi.org/10.1007/s10639-022-11431-8
- U-Sayee, C. R., & Adomako, E. B. (2021). Supervisory practices and challenges faced by senior high school principals in Greater Monrovia, Liberia: implications for quality education. *Heliyon*, 7(4), e06895.1-8. https://doi.org/10.1016/j.heliyon.2021.e06895
- Udin, U. (2023). Leadership styles and their associated outcomes: A bibliometric review using VOSviewer. *International Journal of Human Capital in Urban Management*, 8(4), 443–456. https://doi.org/10.22034/IJHCUM.2023.04.01
- Veletić, J., Price, H. E., & Olsen, R. V. (2023). Teachers' and principals' perceptions of school climate: the role of principals' leadership style in organizational quality. In *Educational Assessment, Evaluation and Accountability* (Vol. 35, Issue 4). Springer Netherlands. https://doi.org/10.1007/s11092-023-09413-6
- Ventista, O. M., & Brown, C. (2023). Teachers' professional learning and its impact on students' learning outcomes: Findings from a systematic review. *Social Sciences and Humanities Open*, 8(1), 100565.1-19. https://doi.org/10.1016/j.ssaho.2023.100565
- White, M. (2023). Sample size in quantitative instrument-based studies published in Scopus up to 2022: An artificial intelligence aided systematic review. *Acta Psychologica*, *241*(November), 104095.1-8. https://doi.org/10.1016/j.actpsy.2023.104095
- Winstone, N. E., & Nash, R. A. (2023). Toward a cohesive psychological science of effective feedback. *Educational Psychologist*, *58*(3), 111–129. https://doi.org/10.1080/00461520.2023.2224444
- Yirci, R., Karakose, T., Kocabas, I., Tülübaş, T., & Papadakis, S. (2023). A Bibliometric Review of the Knowledge Base on Mentoring for the Professional Development of School Administrators. *Sustainability (Switzerland)*, 15(4), 1–25. https://doi.org/10.3390/su15043027
- Zainal Abidin, M. S., Mokhtar, M., & Arsat, M. (2023). School Leaders' Challenges in Education for Sustainable Development: A Scoping Review. *International Journal of Academic Research in Progressive Education and Development*, 12(1), 1-20. https://doi.org/10.6007/ijarped/v12-i1/15922