



# The Application of Scientific Coaching in Improving Learning Quality at Junior High Schools Negeri 4 Geyer, Grobogan Regency

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**Abstract:** This study aims to describe and analyze the implementation of academic supervision based on scientific coaching at SMP Negeri 4 Geyer through a descriptive qualitative approach. Data were collected through interviews, observations, and documentation, then analyzed through presentation, reduction, and conclusion. The study results indicate that 1. planning of academic supervision based on scientific coaching implemented through initial meetings between the principal and teachers to analyze teacher development needs in improving the quality of learning by analyzing educational report cards. Furthermore, the principal forms a work team tasked with compiling an annual work plan based on the academic report card analysis results. Afterward, the work team compiles objectives, plans, strategies, and coaching schedules. The work team also compiles assessment instruments to understand the curriculum, teaching modules, and observation sheets. 2. The implementation of coaching-based academic supervision is carried out in three stages: observation, pre-observation, and post-observation. Pre-observation is carried out by checking the learning administration and observation by observing the learning process in the classroom. After observation, post-observation is carried out. In this post-observation, the principal conducts coaching on the learning process that the teacher has carried out. 3. Evaluation and follow-up of coaching-based academic supervision. In this stage, the principal evaluates and follows up by compiling plans and programs for future coaching-based academic supervision. Based on research results, supervision Coaching-based academics can improve the quality of learning and help teachers enhance learning practices.

**Keywords:** Academic Supervision; Coaching; Learning Quality

## Introduction

The principal plays a vital role in improving the quality of learning. Therefore, the principal must monitor and evaluate teaching methods to improve teacher performance and ultimately improve the quality of learning (Furman et al., 2021). Through academic supervision, quality learning is indicated by the learning behaviour of educators (teachers), student behaviour, learning climate, learning materials, media, and learning systems. The main factors that influence the quality of learning include program management, curriculum implementation, teaching methods, and evaluation systems (Mackinnon, 2004).

Academic supervision is one of the responsibilities that the principal must carry out to help educators develop their ability to manage the class through the proper learning process to achieve learning goals (Seiden Hyldegård & Jensen, 2023). However, the supervision activities carried out are usually carried out conventionally (Malunda et al., 2021). Academic supervision is carried out only to assess the teacher's understanding of the curriculum and the implementation of learning; many teachers still do not understand the importance of supervision (Patel, 2016). For this reason, a practical approach is needed to develop leadership skills, improve welfare, and facilitate

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the achievement of organizational goals through coaching.

In the context of education, coaching has been shown to provide many benefits to teachers and have a significant positive impact on the overall development of children in the teaching and learning process (van Vondel et al., 2018). Coaching is essential for teachers facing the challenge of a lack of skills and knowledge related to the tasks at hand and can improve their performance to a higher level (Reddy, 2023). The use of a coaching approach is considered adequate and efficient because many studies, including those from the International Coach Federation (ICF), show the success of coaching. According to the International Coach Federation (ICF), 65% of professionals experience increased work performance through the coaching process, and 80% report feeling better and developing self-confidence (Mardiyatun, 2021).

Coaching-Based Academic Supervision aims to explore teacher potential. Help individuals recognize their strengths and weaknesses so they can make meaningful improvements. This approach encourages collaboration and support in academic supervision and emphasizes solutions rather than criticism. The coaching stages include planning, observation, analysis, feedback, and Development of Action Plans, according to (Furman et al., 2021). Based on the coaching stages, academic supervision emphasizes reflection, constructive feedback, and clear action plans for improving learning, implementation, evaluation, and follow-up to ensure sustainable changes in teaching quality (Hsieh et al., 2021).

Coaching-based academic supervision is a series of activities of the principal to help teachers develop competencies in improving learning to achieve educational goals, empowering and exploring potential through conversation and direct observation (Nugent et al., 2018). Empowerment and exploration of teacher potential are related to the curriculum implementation, selection, and use of teaching methods, teaching tools, procedures, and teaching evaluation techniques that significantly affect the quality of learning (Davis et al., 2018).

To improve the quality of learning, the principal provides guidance and coaching in terms of curriculum implementation, selection and use of teaching methods, teaching tools, procedures and teaching evaluation techniques through several stages (Furman et al., 2021; Refvem & Jones, 2025). These consisting of a) Initial meeting to identify teacher development needs analysis in improving the quality of learning; b) Observation by observing learning activities in the form of planning, implementation, and evaluation of learning consisting of apperception, mastery of material, use of media, LKPD, formative assessment, and class management; and c)

Follow-up discussion by conducting learning reflection, feedback and development of action plans.

Previous research shows that coaching-based academic supervision can improve the quality of learning (Stynes & Pathak, 2022). Teachers who initially had low teaching quality scores improved after being given coaching with structured coaching-based academic supervision by the principal (Eisenkraft & Marrero, 2025). If coaching with coaching-based academic supervision is carried out routinely and continuously, the principal will become more skilled in coaching. (Reddy, 2023) This will build the need for a sense of security for teachers from a stronger personal relationship with the principal. Ultimately, it also affects the growth of teacher confidence in their potential to continue to perform at their best. Because supervision skills are one of the competencies that must be present in a madrasah principal, supervision should not stop at the assessment results. The principal must be able to provide guidance that makes teachers feel appreciated, no matter how small their efforts to make improvements (Rehvem & Jones, 2025). Coaching-based academic supervision is the right way to do this and needs to be understood by principals who want to improve teachers' teaching performance in the schools they lead.

The novelty of this research is that the researcher conducted coaching-based academic supervision with the stages of determining objectives, analyzing the current situation related to problems related to the quality of learning in educational units, seeking alternative solutions for teachers whose learning quality is still lacking, and carrying out follow-up and commitment so that teachers have an action plan to improve the quality of their learning.

Coaching-based academic supervision has been implemented at SMP Negeri 4 Geyer, Grobogan. Although initially faced with challenges such as low enthusiasm for academic supervision, initial results show that this approach has a measurable positive impact on the quality of learning, as reflected in the increase in the Education Report score. This study aims to describe the implementation of coaching-based academic supervision at SMP Negeri 4 Geyer. It focuses on the planning, implementation, evaluation, and follow-up stages and provides a description of how coaching can improve teacher professional development and student learning outcomes. This study is essential to understand how coaching-based academic supervision can transform learning and improve school learning quality.

## Method

Study This uses a qualitative descriptive approach (Larashati et al., 2022), with the objective of describing

the deep and holistic implementation of Coaching-Based Academic Supervision in an effort to improve quality learning at SMP Negeri 4 Geyer, Geyer Regency Grobogan. Through this approach, research focused on depicting observed behavior, processes, and experiences in a narrative and contextual way.

Types of data collected in the study This is qualitative data, which is sourced from live observation, in-depth research, and documentation. The informants' study consists of head teachers, teachers, participants, and students involved directly in activity supervision. The determination technique is purposive sampling, namely based on the consideration that the informant has relevant and significant information to focus the study.

In research, the researcher plays a role as an instrument, the main one who collects and interprets data in the field. To support implementation data collection, researchers also use instrument help in the form of guidelines interviews, observation, and sheet documentation. Data collection techniques are carried out through: (1) Observation to practice supervision academic in the environment school; (2) Interview deep with head schools, teachers, and participants educate; (3) Documentation study on documents related to activity supervision, such as supervision programs, report implementation, and results evaluation learning.

Data that has been collected and analyzed using the analysis model Miles and Huberman's interactive, consisting of four main stages: (1) Data collection; (2) Data reduction (sorting and simplification) of relevant information; (3) Presentation of data in the form of narrative, descriptive, and thematic, as well as; (4) Withdrawal conclusion and verification as results end from the analysis process.

For guard data validity, triangulation sources and methods, as well as validation results findings through confirmation to the informant (member checking), were used.

## Result and Discussion

The results of this study include planning, implementation, evaluation, and follow-up of coaching-based academic supervision, which improved the quality of learning at Geyer 4 State Middle School.

*Coaching-based academic supervision planning to improve the quality of learning*

a. Analyzing teacher needs in improving the quality of learning

The principal held an initial meeting to analyze teacher needs in improving the quality of learning through an initial meeting for teacher development needs and analysis of the results of the 2024 education

report card. The results of the teacher needs analysis show:

- 1) Competence and professional development: lack of ongoing training and minimal access to training relevant to the latest curriculum,
- 2) Supporting facilities and resources: limited learning resources, such as adequate teaching materials, technology, or laboratories,
- 3) Teacher motivation and workload: heavy administrative burden reduces focus on the teaching process, lack of adequate appreciation and recognition for the role of teachers,
- 4) Communication and collaboration: lack of collaboration between teachers to share experiences and effective teaching methods,
- 5) Teacher welfare: Physical and mental well-being issues due to high work pressure and the few honorary teachers.

One of the primary references for identifying teacher development needs in improving the quality of learning is improving teacher competency in learning planning and implementation, including classroom management, learning methods, and use of learning media. The analysis of teacher development needs in improving the quality of learning then encouraged the school to identify further needs in planning coaching-based academic supervision at State Junior High School 4 Geyer.

b. Develop coaching goals, plans, strategies, and schedules

The principal forms a working team to prepare a coaching-based supervision program. Furthermore, the principal holds an initial meeting with the working team to develop strategies, goals, plans, and schedules. The purpose of the coaching-based academic supervision program is to improve the quality of learning characterized by classroom management and appropriate learning methods. The program targets individual teachers, subject groups, or all teachers in the school. Next, the principal conducts individual coaching by mentoring teachers in preparing lesson plans or teaching methods. The principal conducts coaching through 3 stages, pre-observation, observation, and post-observation, which are arranged in the supervision schedule.

c. Developing an instrument for coaching-based academic supervision

The principal prepares coaching-based supervision instruments to improve the quality of learning needed to understand the curriculum, master teaching materials, and prepare teaching programs.

*Implementation of coaching-based academic supervision improves the quality of learning at State Junior High School 4 Geyer.*

- Implementing socialization of the implementation of coaching-based academic supervision activities to improve the quality of learning

Implementing coaching-based academic supervision activities to improve the quality of learning was socialized during the work meeting at the beginning of the school year and through periodic information provision to teachers of SMP Negeri 4 Geyer, with the hope that teachers could prepare better.

- Carrying out pre-observation, observation, and post-observation activities on teaching and learning activities

Coaching-based academic supervision at SMP Negeri 4 Geyer is implemented by observing learning preparation and implementation. In the first activity, the supervisor reviews the learning tools that the teacher has made. The second activity is supervising the learning process with learning observations that begin with coordination between the teacher and the supervisor. The supervisor informs the schedule and asks about the teacher's readiness to be supervised. The supervisor enters the class and observes the learning activities at the agreed time. The supervisor observes the activities of opening the lesson, implementing the learning, and closing the lesson, which includes apperception activities, teacher mastery in delivering lesson materials, use of media, preparation of student worksheets, and class management.

- The principal carries out the third component, namely observation of specific elements.

The components observed by the supervisor are the supervision activities of learning devices, including teaching materials, learning methods, learning outcome assessment formats, and learning resources used. Then, in the supervision of the learning process, the supervisor observes the activities of opening lessons, implementing learning, and closing lessons, which include Initiating questions carried out in apperception activities, teacher mastery in delivering lesson materials, use of media,

preparation of student worksheets, class management.

*Evaluation and follow-up of coaching-based academic supervision in improving the quality of learning at State Junior High School 4 Geyer.*

- Evaluation and follow-up of coaching-based academic supervision to improve the quality of learning

The principal and the supervision team analyze the results of academic supervision, including analysis of the results of the learning planning examination, the results of learning implementation, and the results of learning assessments. The principal uses the results of the academic supervision analysis as material for providing feedback and follow-up plans. To determine the implementation of the coaching-based supervision program, the principal offers a reflection-based assessment and assists teachers in developing their competencies.

- The principal held a joint discussion regarding the follow-up to the results of academic supervision in improving the quality of learning.

The principal conveys the reflection results to each teacher through personal conversations. With reflection-based discussions, teachers can explore what good things have been done to improve the quality of learning so that the principal can help teachers develop action plans. The results of the academic supervision evaluation are used as a reference for the program to improve the quality of learning in the following year. The principal conducts conversations to analyze the obstacles teachers encounter in the learning process with students.

- The principal prepares a coaching-based supervision plan and program to improve the quality of future learning.

The principal helps teachers map their potential strengths and develop an action plan for teacher competency development. From this analysis, programs to improve the quality of learning, such as IHT, workshops, teacher internships, and facilities needed for future learning, are determined.

**Table 1.** Research Findings **Coaching-based** Academic Supervision

No	Subfocus	Component	Findings Study
1	Academic Supervision Planning coaching based	Analyzing teacher needs in improving the quality of learning  Develop coaching goals, plans, strategies, and schedules,	The teacher development needs analysis is prepared in an initial meeting between the principal and all teachers, which discusses the teacher needs analysis based on the education report card analysis.  The principal forms a working team to prepare a coaching-based supervision program. Furthermore, the principal holds an initial meeting with the working team to develop strategies, goals, plans, and schedules. The purpose of the coaching-based

No	Subfocus	Component	Findings Study
2	Implementation of coaching-based academic supervision	<p>Developing an instrument for coaching-based academic supervision</p> <p>Implementing socialization of the implementation of coaching-based academic supervision activities to improve the quality of learning</p> <p>Carrying out pre-observation, observation, and post-observation activities on teaching and learning activities</p> <p>The components observed by the supervisor are the supervision activities of learning devices, including teaching materials, learning methods, learning outcome assessment formats, and learning resources used. Then, in the supervision of the learning process, the supervisor observes the activities of opening lessons, implementing learning, and closing lessons, which include Initiating questions carried out in apperception activities, teacher mastery in delivering lesson materials, use of media, preparation of student</p>	<p>academic supervision program is to improve the quality of learning, which is characterized by classroom management and appropriate learning methods.</p> <p>The coaching-based academic supervision instrument at SMP Negeri 4 Geyer found components of coaching supervision instruments. The coaching instrument is not in the form of an assessment checklist. Still, it contains aspects such as (a) Teacher and class identity, (b) Learning focus (for example, active learning, formative assessment), (c) Descriptive observation notes (observed facts, not opinions), (d) Reflective questions for coaching sessions, such as: What do you think was successful in the learning process? What challenges did you experience? What strategies can you try in the future? (e) Teacher reflection column. The principal held a socialization through a meeting with the teachers' council, which all teachers attended.</p> <p>Coaching-based academic supervision is carried out through <b>Pre-observation</b> to obtain agreement on the observed learning focus. Next is <b>Class Observation</b>. The supervisor observes learning without intervening. Focus on teacher-student interaction, classroom management, and learning strategies. After that, <b>Coaching (Post-Observation) is carried out</b>. After observation, a reflection-based coaching session is carried out. The supervisor facilitates open dialogue and motivates teachers to develop improvement plans.</p> <p>Coaching-Based Academic Supervision Activities at SMP Negeri 4 Geyer are recorded in a journal to record pre-observation, observation, and post-observation activities, and post-learning, coaching dialogue with teachers, teacher reflective progress, and follow-up on professional development.</p> <p>The journal format is comprehensive and flows according to the coaching cycle. Reflective questions raise teacher awareness, and Teacher reflections are documented, becoming the basis for follow-up; there is continuity between observation and practice development.</p> <p>Attendance List of Coaching-Based Academic Supervision at SMP Negeri 4 Geyer assessed the implementation of coaching-based academic supervision in real terms, including the components needed for tracking and documenting activities, integrated with the coaching cycle (pre, observation, post), used as a basis for monitoring and evaluating teacher coaching. Accompanied activity journals are only in manual paper form and are prone to being lost or difficult to summarize, so a digital version should also be available.</p> <p>Coaching-based academic supervision at SMP Negeri 4 Geyer is implemented by observing learning preparation and implementation. In the first activity, the supervisor reviews the learning tools made by the teacher. The second activity supervises the learning process with learning observations that begin with coordination between the teacher and the supervisor. The supervisor enters the class and observes learning activities at the agreed-upon time.</p>

No	Subfocus	Component	Findings Study
3	Evaluation and follow-up of coaching-based academic supervision	<p>worksheets, class management.</p> <p>The principal evaluates coaching-based academic supervision in improving the quality of learning at SMP Negeri 4 Geyer</p> <p>The principal held a joint discussion regarding the follow-up to the results of academic supervision in improving the quality of learning.</p> <p>The principal prepares a coaching-based supervision plan and program to improve the quality of future learning.</p>	<p>Evaluation of Coaching-Based Academic Supervision of SMP Negeri 4 Geyer found that the evaluation report (a) reflects the results of holistic coaching-based supervision, (b) contains an in-depth analysis of the effectiveness of supervision and its impact on teacher practice, (c) provides concrete and data-based recommendations for further development, (d) can be used as material for improvement and follow-up for teachers and schools. The results of the review of the supervision report found the following strengths: (a) The report is very structured, with clear sections leading to reflective and data-based analysis; (b) Includes an evaluation of the impact of supervision, not just activities, (c) The relevance of recommendations is clear, both for teachers and for school policy, (d) Detailed follow-up, providing opportunities for continuous improvement and development.</p> <p>The principal provides feedback to teachers, directly highlighting strengths and areas for improvement. The principal uses an empathetic and supportive approach to motivate teachers to improve. The principal discusses supervision results with teachers to understand their perspectives and discuss solutions. The principal recommends that teachers attend training or workshops based on identified needs, such as improving teaching methods or utilizing educational technology. The principal directly coaches or mentors teachers to guide improvements in certain areas.</p> <p>The principal and the teachers prepare a clear and realistic action plan to address deficiencies, namely changing learning strategies or re-drafting the lesson plans.</p> <p>The principal sets concrete, evaluable targets, such as increasing student engagement in group discussions.</p> <p><b>Monitoring and Re-evaluation</b></p> <p>The Principal schedules follow-up observations to evaluate the implementation of the improvement plan.</p> <p>The principal conducts Periodic Evaluations to monitor teacher development periodically to ensure improvements align with expectations.</p> <p>The principal continues to support teachers by providing inspiration and solutions for learning.</p> <p>The principal encourages collaboration between teachers to share experiences and best practices.</p>

Based on the presentation of data from documentation, observation, and interviews of coaching-based academic supervision at SMP Negeri 4 Geyer, the principal and team have conducted academic supervision to improve the quality of learning.

*Academic supervision planning based on coaching to improve the quality of learning at Geyer 4th State Middle School*

This study discusses the planning of academic supervision at SMP Negeri 4 Geyer. The results indicate that academic supervision planning is carried out collaboratively between supervisors (principals/supervisors) and teachers. This process includes identifying teacher development needs, preparing goals, plans, strategies, and coaching schedules for teacher academic supervision, and

preparing coaching instruments that are adjusted to improve the quality of learning.

Based on interview data, observations, and documentation review on the identification of teacher development needs in improving the quality of learning, it was found that teacher competence increased in learning planning and implementation, including classroom management, learning methods, and the use of learning media (Knight et al., 2018). The analysis of teacher development needs in improving the quality of learning then encouraged the school to identify further needs in planning coaching-based academic supervision at State Junior High School 4 Geyer.

The formulation of strategies, objectives, and plans in the study is shown through meeting minutes showing that the principal sets supervision objectives, such as

improving teacher pedagogical competence or improving student learning outcomes; targets include individual teachers, subject groups, or all teachers in the school. The principal prepares coaching-based supervision instruments to enhance the quality of learning needed to understand the curriculum, master teaching materials, and organize teaching programs. Furthermore, the work team prepares instruments, learning programs, and teaching tools. The results of the study are strengthened by the results of the survey by **Suharyanto H. Soro et al. (2024)** on the Implementation of Academic Supervision with Coaching Techniques at SD Negeri Cicalengka 06, which was carried out based on academic supervision planning through coaching (Soro et al., 2024). The principal has carefully planned, and coaching-based supervision is carried out every semester or twice in one academic year. The implementation of the coaching technique uses the TIRTA flow model: Objectives (T), identification (I), Action Plan (R), and Responsibilities (TA). This model can effectively improve teacher pedagogical competence and strengthen school learning quality through self-development and collaboration.

In theory, academic supervision is a learning program designed to help educators hone their skills in managing student learning to achieve predetermined goals. Evaluating how well teachers manage their students' learning is integral to academic supervision. According to Mutahajar (2019: 22), the objectives of academic supervision include guiding educators and support staff in their work, helping teachers hone their current skills, and shaping the curriculum with student learning in mind (Soro et al., 2024).

Academic supervision is the principal's assistance to teachers, which aims to improve the quality of teaching and learning activities (Vehviläinen & Löfström, 2016). Academic supervision focuses on improving teacher performance, curriculum effectiveness, the effectiveness and efficiency of facilities and infrastructure, better school management, and the quality of the school environment in general (Rasul & Mandal, 2021).

Nasution (2023) explains that the principal's skills in academic supervision include program development, teacher evaluation and follow-up, and the use of appropriate supervision approaches and techniques (Mutahajar, 2019). Increasing professionalism among educators is a primary goal of many academic supervision initiatives. In terms of educational supervision, the principal plays a vital role. Mistakes in this supervision will hurt the institution, its teachers, and students. Teachers must be aware that this principle recognizes the importance of competent monitoring. Having this principal knowledge is very important. The principal's guidance will influence the learning plan.

It is defined as a structured dialogue between superiors and subordinates (or teams) that utilizes data on actual performance to improve performance (Refvem & Jones, 2025). Coaching is a communication-based method that encourages the coach to reach their full potential by listening attentively, asking insightful questions, and providing constructive and positive criticism. Principals need mature emotional control, the ability to listen attentively, and empathy and patience to implement coaching for teachers. This is because coaching is not an easy method to apply. Formal or informal coaching can be done in various ways. The most crucial thing is that teachers feel appreciated and not evaluated, so they are more dedicated to correcting their mistakes (Hsieh et al., 2021; Weitzel & Blank, 2020; Wilder & Diec, 2025).

The research findings show that the program to improve the quality of learning in coaching-based academic supervision planning at Geyer 4 State Middle School has been implemented by formulating problems in coaching-based academic supervision planning.

*Implementation of coaching-based academic supervision to improve the quality of learning at Geyer 4 State Middle School*

The implementation of coaching-based academic supervision carried out by the Principal of Geyer 4 State Middle School went through the following stages: (1) socialization of the implementation of coaching-based academic supervision activities in improving the quality of learning, (2) activities carried out in the implementation of coaching-based academic supervision, (3) components observed and assessed by the supervisor.

So, the implementation of coaching-based academic supervision activities to improve the quality of learning was carried out during the work meeting at the beginning of the school year and through periodic information provision to teachers of SMP Negeri 4 Geyer with the hope that teachers could prepare better.

Coaching-based academic supervision at SMP Negeri 4 Geyer is done by observing learning preparation and implementation. In the first activity, the supervisor reviews the learning devices that the teacher has made. The second activity is supervising the learning process with learning observations that begin with coordination between the teacher and the supervisor. The supervisor informs the schedule and asks about the teacher's readiness to be supervised. The supervisor enters the class and observes the learning activities at the agreed time.

As a supervisor, the principal examines learning devices, including teaching materials, learning methods, learning outcome assessment formats, and learning resources used. Then, in the supervision of the learning process, the supervisor observes the activities of opening

lessons, implementing learning, and closing lessons, which include apperception activities, teacher mastery in delivering lesson materials, use of media, preparation of student worksheets, and class management. For supervision of learning outcome assessment, the supervisor observes formative assessments.

According to the interview results, observations showed that the school principal held a socialization of implementing coaching-based supervision. Coaching-based academic supervision will be carried out through Pre-observation to agree on the focus of learning to be observed. Next is Class Observation. The supervisor observes learning without intervening. Focus on teacher-student interactions, classroom management, and learning strategies. After that, Coaching (Post-Observation) was carried out. After the observation, a reflection-based coaching session was carried out: What worked? What can be improved? What is the teacher's next plan? The supervisor facilitates open dialogue and motivates teachers to develop improvement plans. This is in line with the results of research conducted by Juhadira et al. (2024), which shows that teachers involved in coaching show increased motivation, self-confidence, and fundamental changes in teaching practices. Document analysis supports these findings by identifying measurable changes in teaching practices by applying strategies obtained through coaching. These findings are consistent with previous research literature that confirms the effectiveness of coaching in teacher professional development and improving the quality of learning. In conclusion, the coaching method in academic supervision is not just a strategy but a holistic approach that has a positive and measurable impact on teacher performance and the achievement of educational goals in schools.

The results of this study are in line with research conducted by Lolowang, Y., Wolter Weo, Meyke M. Mamahit (2024) Implementation of Coaching-Based Academic Supervision for Christian Religious Education Teachers at SMP Negeri I Lolak, Bolaang Mongondow Regency carried out by supervisors tends to be administrative, because supervisors only focus on checking the availability of teacher learning devices, namely: RPP, Syllabus, Prota and Prosem, attendance lists, grade lists and textbooks, and others (Lolowang et al., 2024). Implementing academic supervision with a coaching paradigm involves checking teacher learning devices and class visits while teachers learn. Class visits are carried out to observe and objectively assess all activities carried out by teachers and students. Suppose there is something that the teacher does in the learning process that is not by applicable standards. In that case, it will be recorded by the supervisor to be discussed with the teacher after the learning process is complete. The discussion is conducted in a friendly, friendly, and open

manner, in which the supervisor helps, guides, and directs teachers to find solutions to problems that occur both from the teacher and student aspects during the learning process. This activity must be followed up and carried out continuously.

The results of this study are relevant to Jim Knight's opinion in Lolowang (2024) on Instructional Coaching, namely building relationships, identifying goals, observation and data collection, reflection and feedback, developing action plans, implementation and support, and evaluation and re-reflection: After implementation, the coach and teacher evaluate the results and reflect again to determine the next steps, ensuring continuous improvement (Lolowang et al., 2024).

Efforts to improve teacher performance are always a concern for education providers, from the government, stakeholders, committees, communities, and various other parties, including the principal. The principal has duties and functions, including conducting supervision within the school. The quality of teacher performance will significantly determine the quality of educational outcomes because teachers are the parties who have the most direct contact with students in the madrasah/school education process. The quality of teacher performance will significantly determine the quality of educational outcomes because teachers are the parties who have the most direct contact with students in the madrasah/school education process. The principal as a supervisor means that the principal functions as a supervisor, controller, coach, director, and example provider to teachers and other school residents.

#### *Evaluation and follow-up of coaching-based academic supervision to improve the educational quality of Geyer 4 State Middle School*

The results of the study show that the evaluation of coaching-based academic supervision is carried out by the principal together with the supervision team by analyzing the results of educational supervision, which includes analysis of the results of the learning planning examination, the results of learning implementation, and the results of learning assessments. The principal uses the results of the academic supervision analysis as material for providing feedback and follow-up plans. To determine the implementation of the Coaching-based supervision program, the principal guides, provides reflection-based assessments, and assists teachers in developing their competencies through action plans.

Follow-up of academic supervision results in improving the quality of learning: each teacher is delivered personally and through personal conversations between the principal and the teacher. With reflection-based discussions, teachers can explore what good things have been done to improve learning

quality, and the principal can help teachers develop action plans. The results of the academic supervision evaluation are used as a reference for the learning quality improvement program in the following year. The principal conducts conversations to analyze the obstacles teachers encounter in the learning process with students. The principal helps teachers map their potential strengths and prepare an action plan for developing teacher competency. From this analysis, programs to improve the quality of learning are determined, such as IHT, workshops, teacher internships, and the facilities needed for future learning.

The preparation of coaching-based supervision plans and programs to improve the quality of future learning is carried out through coaching by supervisors to help teachers improve their competence, skills, and performance. Securing data and information from supervision results is critical to maintaining confidentiality, integrity, and trust in the supervision process. This study's results align with research conducted by (Tanggulungan & Sihotang, 2023) who studied the application of coaching techniques by principals to improve teacher teaching performance, considering the weak performance due to the lack of structured guidance. The study's results showed that the coaching method effectively improved teacher performance, as seen from the increase in supervision observation scores after coaching. In conclusion, the academic supervision model with coaching techniques by principals has proven effective and is recommended to be implemented routinely, accompanied by special training for principals, so that guidance is more optimal. Developing an academic supervision model that combines coaching techniques has great potential to improve teacher performance. Coaching techniques in academic supervision allow teachers to get more personal and targeted guidance, which can help them identify their strengths and weaknesses and set more realistic and achievable professional development goals. Through this approach, supervision is an evaluation tool and a means of self-development for teachers.

According to theory, the coaching approach is one of the choices to improve teachers' abilities in learning (Mardiyatun, 2021). Coaching was chosen because it is a form of intervention to develop individual potential. These namely teachers focus on specific targets through conversations and observations by coaches in a friendly and familial human relationship atmosphere. The coaching approach was chosen because it creates positive communication from the start, so providing coaching and mentoring to teachers is a positive thing. The coaching approach improves teachers' abilities to enhance children's cognitive development (Mopangga, 2021).

## Conclusion

Coaching-based academic supervision at SMP Negeri 4 Geyer has been implemented effectively through systematic planning, implementation, evaluation, and follow-up stages. This approach has improved teacher competence, especially in planning, implementing, and evaluating learning. Strengthening this competence is reflected in the increasing professionalism, collaboration, and self-reflection of teachers as the main results of the coaching process. Theoretically, this finding reinforces the concept of the principal as an agent of change in improving the quality of learning. In terms of policy, the results of this study can be the basis for designing training and professional development programs for principals. The practical implications of this finding indicate that the coaching model is worthy of being recommended as a strategy for developing school quality. The principal has a vital role as a coach who facilitates teacher growth through reflective guidance and ongoing mentoring. Therefore, support from the education office in the form of relevant policies and training is needed to expand the application of coaching in various educational units.

### Author Contributions

Conceptualization, T.Y.A. and E.W.; methodology, T.Y.A.; software, R.B.G.; validation, T.Y.A., E.W. and R.B.G.; formal analysis, T.Y.A.; investigation, T.Y.A.; resources, E.W.; data curation, R.B.G.; writing original draft preparation, T.Y.A.; writing review and editing, E.W. and R.B.G.; visualization, R.B.G.; supervision, E.W.; project administration, T.Y.A.; funding acquisition, E.W. All authors have read and agreed to the published version of the manuscript.

### Author Contributions

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The authors declare no conflict of interest

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