

## The Effect of Collegial Supervision on Teacher Learning Quality at SMA Negeri 4 Medan

Maria Silaen<sup>1</sup>, Aman Simaremare<sup>1</sup>, Nathanael Sitanggang<sup>1</sup>, Irsan<sup>1</sup>

Universitas Negeri Medan<sup>1</sup>

Deli Serdang Regency, North Sumatera, Indonesia 20221

Correspondence email: [chemy.girl@gmail.com](mailto:chemy.girl@gmail.com)

### ARTICLE INFORMATION

#### Publication information Research article

#### HOW TO CITE

Silaen, M., Simaremare, A., Sitanggang, N., & Irsan. (2025). The effect of collegial supervision on teacher learning quality at SMA Negeri 4 Medan. *Current Issues & Research in Social Sciences, Education and Management*, 3(1), 221–230.

Copyright @ 2025 owned by the Author.  
Published by CIR-SSEM



This is an open-access article.

License:

the Creative Commons Attribution-Non Commercial 4.0 International (CC BY-NC-SA 4.0)

Received: 11 May 2025

Accepted: 12 June 2025

Published: 8 July 2025

### ABSTRACT

This study aims to analyse the effect of collegial supervision on teachers' learning quality at SMA Negeri 4 Medan. The background of this study is based on the finding that the implementation of supervision in schools is still administrative and does not provide constructive feedback to teachers, so it is not optimal in improving the quality of learning. Collegial supervision was chosen as an alternative because it emphasises collaboration between teachers in similar groups, allowing for discussion, mutual observation, and humane feedback without evaluative pressure. The number of samples used was 30. Data analysis used simple linear regression. The results showed that collegial supervision significantly affected the quality of teacher learning at SMA Negeri 4 Medan. It can be concluded that collegial supervision plays an important role in improving the quality of teacher learning. Furthermore, the data also shows that 91.6% of teacher learning quality variables are influenced by collegial supervision variables, while the remaining 8.4% is explained by other variables outside the model.

**Keywords:** Collegial Supervision, Teacher Learning Quality, teacher performance

## INTRODUCTION

The quality of learning in senior secondary schools is a fundamental aspect that determines the success of national education. One of the strategic efforts that continues to be developed to improve the quality of learning is through the implementation of educational supervision. Supervision acts as a process of mentoring and coaching that aims to improve and develop teacher professionalism, thus having an impact on the effectiveness of the teaching and learning process in the classroom (Suratno et al., 2021). In practice, supervision is not only part of educational administration, but also an important instrument in developing teacher quality and achieving educational goals.

The results of interviews with teachers in the field stated that the current supervision is only limited to activities to fill in the administration on the GTK Room platform, and there is no feedback obtained by the supervised teachers. Therefore, teachers do not know where their weaknesses are in the supervision process. In addition, the supervisors who usually go to the field are the vice principal for curriculum, the head of MGMP and the supervisor. The principal also experienced inconsistency in supervision due to a very busy schedule for activities at school and outside school, so there was an agreement to delegate the curriculum vice principal or the head of MGMP.

In the last five years, data from the National Assessment (AN) and Programme for International Student Assessment (PISA) results have shown a phenomenon of learning quality gaps in Indonesia. Based on the AN results in 2021 and 2022, it was revealed that 1 in 2 students had not achieved the minimum competency in literacy, while 2 in 3 students had not achieved the minimum competency in numeracy. In addition, there is an achievement gap between schools in Java and outside Java, where the performance of the best education units outside Java is equivalent to the lowest in Java. Based on the description above, it is necessary to reform the academic supervision system that has been implemented so far. Academic supervision that has been centred on the principal can be replaced by conducting group supervision with teachers of similar subjects. This can be implemented in SMA Negeri 4 Medan because there are many teachers who teach with different backgrounds, so the implementation of supervision can be carried out with group supervision techniques that can build a working climate and groups in their respective subject departments. This group supervision technique with peers is called Collegial Supervision.

Supervision is an important factor in the implementation of education and teaching improvement as a whole, because supervision is basically a process to improve the quality of education and teaching in schools which contains a teaching programme supported by several elements such as teachers, facilities and infrastructure, curriculum, teaching system and assessment. However, the focus of supervision is on improving and developing the performance of professionals who deal with students. Through improving and developing the performance of teachers, it is hoped that the efforts of guiding, teaching and training students can also develop and can directly increase the effectiveness of the teaching and learning process (Makduani Rivai & Mahmuddin, 2021).

In the Joint Regulation of the Minister of National Education and the Head of the State Civil Service Agency No 6 of 2011 concerning Guidelines for the Implementation of the Functional Position of School Supervisor and its Credit Score in Chapter II article 3 contains the Main Duties of School Supervisors are to carry out academic and managerial supervisory duties in education units which include the preparation of supervisory programmes, implementation of guidance, monitoring the implementation of 8 (eight) National Education Standards, assessment, mentoring and professional training

of Teachers, evaluation of the results of the implementation of supervisory programmes, and implementation of supervisory duties in special areas.

Given the very dense workload and responsibilities of school principals as supervisors, school supervisors are required to be able to carry out their duties and roles optimally. From the description above, the guidance or services provided by supervisors are called supervision. Supervision is the supervisor's effort to assist teachers in improving their professional abilities and work ethic so that they are better able to overcome learning problems that arise and improve learning (Nugroho et al., 2022).

The importance of the role of teachers as the spearhead of learning success has been regulated in various national regulations, such as Law No 20 of 2003 on the National Education System and a number of ministerial regulations related to education supervision. Teachers are required to continuously improve their competence and professionalism, while principals and school supervisors have the responsibility of fostering and supervising the implementation of learning in accordance with applicable education quality standards.

In the implementation of collegial supervision, using humanist methods instead of authoritarian methods will create an atmosphere of warmth and peace. With such methods, teachers will not feel judged or cornered, so it is expected that input from the head of the education unit can be better accepted, lived, and also implemented by teachers (Setyawati, 2024).

The findings of research conducted (Budiman, 2022) on collegial supervision are considered effective for implementation in learning. (Zulfiani et al., 2021) state that there are two things that underlie the importance of the supervision model being developed, namely First, curriculum development, which is always an indicator of educational progress. Second, the development of personnel, employees, or employees is an effort that knows no end in the organisation.

## **LITERATURE REVIEW**

The quality of learning is a key aspect that determines the success of the educational process and the achievement of learning objectives. According to a theoretical study from the UKSW repository, the quality of learning centres on the ability of teachers to carry out the learning process in the classroom, which includes planning, implementation, and evaluation of learning. Teachers are required to be able to design learning that is appropriate to the characteristics of students and community needs, implement learning effectively and attractively, and conduct comprehensive evaluations to ensure the achievement of learning outcomes.

### **a. Learning Planning**

Learning planning is the initial stage that greatly determines the quality of the teaching and learning process. Teachers must develop a Lesson Plan (RPP) that includes learning objectives, materials, methods, media, and evaluation in a systematic manner and in accordance with curriculum standards. Thorough planning enables teachers to anticipate the needs of students and create a conducive and enjoyable learning environment. In addition, good planning also includes selecting innovative learning strategies that are relevant to developments in science and technology.

### **b. Learning Implementation**

Quality learning implementation is characterised by effective interaction between teachers and students, where teachers are able to motivate and activate students in the learning process. Teachers must use varied learning methods that are appropriate to the

characteristics of students so that the learning process is interesting and enjoyable. Good classroom management and the use of appropriate learning media also greatly influence the effectiveness of learning. Effective learning implementation will increase student engagement and help them achieve the expected competencies.

c. Learning Evaluation

Evaluation is an important component of learning quality that serves to measure student learning outcomes and provide feedback for improving the learning process in the future. Good evaluation uses various assessment techniques, such as written tests, performance assessments, portfolios, and self-assessments, which are conducted objectively and transparently in accordance with curriculum standards. In addition, teachers also need to reflect and evaluate themselves to continuously improve the quality of learning.

Etymologically, the term 'supervision' comes from the English word 'supervision,' which means oversight or viewing from above. Morphologically, supervision consists of two words, namely "super" meaning above, and 'vision' meaning to see, point, and watch (Abidin et al., 2021).

The person who conducts supervision is called a supervisor. The word supervisor originates from the Latin *supervidere*, meaning 'to see from above' or 'to oversee.' This term entered the English language in the 15th century as *supervisor*, referring to someone tasked with overseeing and directing the work of others. Etymologically, a supervisor is someone in a higher position who is responsible for monitoring, inspecting, and providing guidance to ensure that the work being done aligns with the expected objectives (Kazi Enamul et al., 2020).

Educational supervision is a systematic process aimed at improving the quality of learning in the classroom through the professional development and training of teachers (Suratno et al., 2021). Supervision aims to improve and develop the teaching and learning process to align with current educational standards, thereby ensuring continuous improvement in the quality of learning.

Collegial supervision is one model of supervision that emphasises collaboration among teachers within a group or team for mutual professional growth (Haris, 2018). This supervision is carried out by teachers observing each other's classrooms, providing feedback, and discussing their teaching practices (Arismunandar, 2015). This collegial supervision model positions teachers as active participants who mutually assist and support each other in enhancing their professional competencies without evaluative pressure, thereby fostering an open and collaborative work environment (Mukhtar et al., 2020).

Thus, collegial supervision is a form of peer support among teachers that prioritises collaborative relationships and mutual support as the key elements. In this model, teachers visit each other's classrooms, observe one another, and provide open and empathetic feedback. Teachers also regularly discuss teaching practices, share experiences, and learn from one another without rigid evaluative pressure.

Collegial supervision techniques include subject teacher meetings (MGMP), faculty meetings, training sessions, and classroom visits, all aimed at improving teaching quality through interaction and reflection (Burhanuddin, 2017). Collegial supervision can also take the form of team teaching, subject coordination, and collaborative planning.

## RESEARCH METHOD

Research methods are approaches and techniques used by researchers to explain the steps in research. The main purpose of research is to solve problems, so the steps taken must be in accordance with the problems that have been formulated. This research is included in quantitative research, which means that the data obtained is presented in the form of numbers and can be generalised (Krisyantono, 2010).

In this study, there are two variables, namely the independent variable (X), namely collegial supervision, and the dependent variable (Y), namely the quality of teacher learning. The measurement tools for this study include several indicators, where collegial supervision is evaluated through indicators of carrying out supervision, direction, solving problems, creating good relationships. Meanwhile, the quality of teacher learning is measured by indicators such as lesson planning, lesson implementation and lesson evaluation.

The data sources in this study consisted of two types, namely observation and questionnaires. The questionnaire used is closed, giving respondents answer choices which include Strongly Disagree (STS), Disagree (TS), Neutral (N), Agree (S) and Strongly agree (SS). Researchers keep their distance from the object when distributing questionnaires so that the data obtained is neutral.

This research was conducted at SMA Negeri 4 Medan which is located at Jalan Gelas No. 12 Medan and was conducted in May-June. The research sample consisted of 30 teachers at SMA Negeri 4 Medan. The sampling technique uses a simple random sample where each member of the population has the same opportunity to be selected (Sugiyono, 2019). The type of research chosen is explanatory research, where the researcher aims to find a cause-and-effect relationship between two variables. Data analysis in this study was conducted to determine the effect of collegial supervision on the quality of teacher learning at SMA Negeri 4 Medan. The analysis method used is simple linear regression, which serves to test whether there is a significant influence between the two variables. Simple linear regression is applied when the research involves two variables, namely the independent variable (X) and the dependent variable (Y). Data processing was conducted using SPSS version 24.0.

## RESULTS

### Validity Test

The validity test is a process to ensure that data collection instruments, such as questionnaires or tests, are really able to measure what should be measured. This test aims to assess whether each item of question or statement in the instrument correlates with the variable or construct under study. The results of the questionnaire obtained were tested for validity using the SPSS 24.0 application. The statement item is valid if  $r(\text{count}) > r(\text{table})$ . In this study using 30 respondents so that it can be seen that  $r(\text{table})$  is 0.361

**Table 1.** Collegial Supervision Variables

Statement	Pearson Correlation (r count)	r table	Description
X1.1	.918**	0,361	valid
X1.2	.946**	0,361	valid
X1.3	.885**	0,361	valid
X2.1	.907**	0,361	valid
X2.2	.918**	0,361	valid
X3.1	.885**	0,361	valid
X3.2	.849**	0,361	valid
X3.3	.938**	0,361	valid
X4.1	.920**	0,361	valid



X4.2	.833**	0,361	valid
------	--------	-------	-------

From the data output results of the SPSS 24.0 calculation, based on the decision-making criteria 10 questions of the Collegial Supervision questionnaire were declared 10 valid questions. It can be seen that the *pearson correlation* is greater than the *r* table value for the 5% significance level, which is 0.361. To make it easier to determine which items are valid, the researchers made a table by entering the significance value of each item in the *pearson correlation*.

**Table 2:** Teacher Learning Quality Variables

Statement	Pearson Correlation (r count)	r table	Description
Y1.1	.882**	0,361	valid
Y1.2	.775**	0,361	valid
Y1.3	.852**	0,361	valid
Y1.4	.732**	0,361	valid
Y1.5	.742**	0,361	valid
Y2.1	.591**	0,361	valid
Y2.2	.820**	0,361	valid
Y2.3	.654**	0,361	valid
Y2.4	.773**	0,361	valid
Y2.5	.819**	0,361	valid
Y3.1	.916**	0,361	valid
Y3.2	.549**	0,361	valid
Y3.3	.895**	0,361	valid
Y3.4	.719**	0,361	valid
Y3.5	.762**	0,361	valid

From the data output of the calculation of SPSS 24.0, based on the decision-making criteria 15 questionnaire questions on Teacher Learning Quality are declared valid. It can be seen that the *Pearson correlation* is greater than the *r* table value for the 5% significance level, which is 0.361.

### Reliability Test

Reliability testing is a process to assess the extent to which a research instrument can provide consistent results when used repeatedly under similar conditions. In other words, reliability shows the level of reliability of measuring instruments in collecting data in a stable manner.

An instrument can be called reliable if the instrument is reliable, consistent, and shows stable results in measuring something to be measured (Amalia, 2023). Reliability testing often uses certain methods, such as *Cronbach's Alpha*. Data is said to be reliable if the Cronbach's Alpha value obtained is greater than 0.6. The following are the results of the reliability test of the Collegial Supervision and Teacher Learning Quality aspects.

**Table 3.** Reliability Test of Collegial Supervision Variables

Reliability Statistics	
Cronbach's Alpha	N of Items
0,973	10

**Table 4.** Reliability Test of Teacher Learning Quality Variable

Reliability Statistics	
Cronbach's Alpha	N of Items
0,949	15

From the results of the reliability test, it was found that all values from the results of variables X and Y produced a *Cronbach's Alpha* value > 0.6. Namely on variable X is 0.973 and variable Y is 0.949. So that all instruments in this study are classified as reliable.

### Simple Linear Regression Test

Simple linear regression test is a statistical technique used to determine the effect of one independent variable (Collegial Supervision) on one dependent variable (Teacher Learning Quality). This analysis aims to build a linear relationship model between the two variables, so that it can be used to estimate the value of the dependent variable based on the value of the independent variable, and test whether there is a significant influence between the two.

Hypothesis testing in this study was to determine the effect of collegial supervision on the quality of teacher learning at SMA Negeri 4 Medan. The data analysis technique for this simple linear test uses SPSS 24.0.

**Table 5.** Simple Linear Regression Test

Coefficients <sup>a</sup>						
Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17,924	2,686		6,674	0,000
	Collegial Supervision	1,112	0,063	0,957	17,529	0,000

a. Dependent Variable: Teacher Learning Quality

Based on table 5 above, the simple linear regression equation is obtained as follows:  $Y = 17.924 + 1.112 X$ . This equation shows that the regression coefficient of the independent variable is positive, which means that the collegial supervision variable has a significant effect on the quality of teacher learning. The results of hypothesis testing in this study are obtained in the t test, the t value is 17.529 and this value is greater than t (table) 1.701. So it can be concluded that the Collegial Supervision variable has an effect on the Teacher Learning Quality variable. With a probability value (sig) of 0.000 which is smaller than 0.05, the decision is  $H_0$  is rejected and  $H_a$  is accepted, which means that there is an influence of Collegial Supervision (X) on Teacher Learning Quality (Y).

### Determination Coefficient Test

The Coefficient of Determination ( $R^2$ ) test is used to measure how far the model's ability to explain variations in the dependent variable. The  $R^2$  value can range from 0 to 1, and the closer to 1, the better the model is in explaining the variation in existing data.

**Table 6.** Determination Coefficient Test

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.957 <sup>a</sup>	0,916	0,913	2,276

b. Predictors: (Constant), Collegial Supervision

The Coefficient of Determination test obtained the value of R square is 0.916. This reveals that the magnitude of the coefficient of determination (influence) X on Y is 0.916. This means that 91.6% of teacher learning quality variables are influenced by collegial supervision variables, while the remaining 8.4% is explained by other variables outside the model.

## DISCUSSION

This study concluded that collegial supervision has a significant influence on the quality of teacher learning. Collegial Supervision is supervision by providing assistance to fellow teachers by cooperating, providing mutual encouragement, guidance to improve each other's competence in solving problems faced during the teaching process (Lisna & Munastiwi, 2020). Collegial supervision can also be defined as a process in which two or more teachers commit to growing together professionally. Typically, they observe each other learning in the classroom, give feedback to each other and discuss various matters related to the teaching profession. In this model, teachers have the space to discuss with their peers the tasks and challenges of their job, through a structured and clear programme. Meetings in teachers' working groups are an effective means to nurture and develop each other professionally. If managed well, these working groups provide many benefits, such as the opportunity to share experiences, exchange ideas in finding solutions to learning problems, and foster motivation to continue improving themselves as educators.

This study found that collegial supervision is more effective in improving the quality of teacher learning, in contrast to the findings of (Setiati & Rugaiyah, 2023) which showed that clinical supervision is a reliable and more effective method in improving the quality of learning for the reason that supervision activities are collegial rather than in authoritarian ways so that supervised teachers can feel comfortable in discussing and receiving feedback from the Head of the Education Unit regarding input related to learning carried out in their classrooms and centred on solutions to problems faced by teachers in conducting learning, so that the impact provided is more tangibly felt by teachers. Positive relationships between teachers in collegial supervision proved important in creating an optimal learning environment. Teachers at SMA Negeri 4 Medan feel more motivated when interacting with other teachers who always praise everything they do. In accordance with the results of a recent study by (Supriyono, 2019), which emphasised that if the supervision approach, supervision behaviour orientation, and supervision techniques are carried out in accordance with teachers' professional needs, teachers' competence and performance increase and students' learning outcomes increase as well, as well as public trust increases, and if feedback and follow-up are carried out appropriately either directly, in groups, or individually according to the problems faced by teachers and follow-up is carried out appropriately, teachers' competence increases, teachers' performance increases, and students' learning outcomes achievement also increases

## CONCLUSION

Based on the results of the research and discussion presented above, collegial supervision through MGMP is an effort to improve the quality of teacher learning that has been implemented well and in accordance with the principles of collegial supervision and can improve the quality of teacher learning at SMA Negeri 4 Medan.

The planning of collegial supervision to improve the quality of teacher learning has largely been carried out in accordance with the stages outlined in the plan. However, in determining the objectives of the plan, there are still challenges due to the lack of involvement of all members in setting the objectives, with only the committee members being involved, resulting in the implemented programme failing to meet the needs of many members. Additionally, the lack of member participation has made the needs analysis activities less than optimal.



The implementation of collegial supervision to improve the quality of teacher learning, as seen from the assistance and guidance services provided by teachers to other teachers, is appropriate because it involves all teachers in all aspects, from managers, implementers, participants, and resource persons, and meets the guidance service indicators. However, not all activities carried out in collegial supervision use resource persons from among the members themselves, or in other words, they still involve external parties as resource persons. Thus, the implementation of collegial supervision at SMA Negeri 4 Medan has been developed to suit the current situation and conditions. In its implementation, there is dialogue among teachers, teachers jointly develop the curriculum, teachers mutually monitor learning activities followed by analysis and discussion, and jointly develop them in workshops, action research, mentoring, and lesson study.

The results of the evaluation of this collegial supervision as an effort to improve the quality of teaching at SMA Negeri 4 Medan show an increase in the quality of teaching. Teachers who initially felt difficulty in mastering the learning material after participating in the supervision activities gained more knowledge and applied it in teaching activities both at school and outside of school. The evaluation activities have followed the steps in the evaluation process, starting from determining the objectives, selecting evaluation tools, implementing the evaluation tools, processing the evaluation results, and concluding the evaluation results. The evaluation activities are conducted after each activity and at the end of the semester, with the evaluation process carried out by all members under the supervision of the subject supervisor for physics.

#### **ACKNOWLEDGMENT**

The author would like to express his deepest gratitude to all parties who have provided support and contributions in the preparation and completion of this article. Special thanks are extended to the Principal of SMA Negeri 4 Medan for providing the facilities and opportunities to conduct this research. The author also appreciates the assistance, feedback, and suggestions provided by colleagues, reviewers, and journal editors who have helped in the refinement of this article. Support from family and friends has also been invaluable in completing this research. All the assistance and cooperation provided have been an important motivation for the author in producing this scientific work.

#### **DECLARATION OF CONFLICTING INTERESTS**

The authors declare that there is no conflict of interest regarding the publication of this article.

#### **REFERENCES**

- Abidin, Z., Suniadi, A., & Khoiroh, W. (2021). Approaches and Techniques in Educational Supervision (Z. Abidin, Ed.). KBM Indonesia Publisher.
- Amalia, Ayu, Suryono, & Arthur, Riyan. (2023). Preparation of Research Instruments (Concepts, Techniques, Validity Tests, Reliability Tests, and Examples of Research Instruments. Pekalongan: PT Nasya Expanding Management.
- Budiman, M. (2022). THE DEVELOPMENT OF CHARACTER-BASED COLLEGIAL SUPERVISION IN TEACHER WORKING GROUPS (KKG) AT THE MI LEVEL IN REGION TWO OF THE MAROS DISTRICT MINISTRY OF RELIGION. *Journal of Education Taman Widya Humaniora*, 3(2), 26-44.
- Krisyantono, Rachmat. 2010. *Practical Techniques of Communication Research*. Jakarta: Prenada Media Group
- Lisna, & Munastiwi (2020). The Role of the Principal as a Supervisor to Improve Teacher Professionalism. *Journal of Pelita PAUD*, Vol. 5 No. 1, 7-13
- Makduani Rivai, & Mahmuddin. (2021). Application of Supervisory Management in Improving Teacher Professionalism at SDN 017 Bonra Mapilli Barat, Luyo Sub-

- district, Polewali Mandar Regency. *Scientific Journal of Tarbiyah Umat (JITU)*, Volume 11No 1, 33-42.
- Nugroho, P., Ledo, Y. U., & Christiani, P. (2022). *Educational Supervision* (Safrinal, Ed.; First). CV Azka Pustaka.
- Setiati, R., & Rugaiyah, R. (2023). Implementation of Clinical Supervision on Student-Centred Learning Quality. *JlIP - Scientific Journal of Education Science*, 6(9). <https://doi.org/10.54371/jiip.v6i9.2863>
- Setyawati, A. N. (2024). *THE INFLUENCE OF ACADEMIC SUPERVISION, TEACHER DISCIPLINE AND WORK CULTURE ON THE PERFORMANCE OF STATE BASIC SCHOOL TEACHERS IN KECAMATAN PEDURUNGAN CITY, SEMARANG* [Thesis]. PGRI UNIVERSITY SEMARANG.
- Sugiyono. (2019). *Quantitative, qualitative, and R&D research methods*. Alfabeta.
- Supriyono, S. (2019). Learning Supervision in Junior High Schools (Multi-site Study at SMPN1, SMPN2, and SMPN4 Blitar City). *UM Postgraduate Programme DISERTATION AND TESIS*, 3(1).
- Suratno, E., Noor, MS., Prof. Dr. M., & MM., Dr. R. (2021). PRINCIPAL'S ACADEMIC SUPERVISION OF TEACHER PERFORMANCE IN IMPROVING THE COMPETENCE OF GUNUNG AGUNG MUHAMMADIYAH SMK TEACHERS. *POACE: Journal of the EducationAdministration Study Programme*,1(2). <https://doi.org/10.24127/poace.v1i2.1155>
- Zulfiani, Thaha, H., & Mahmud, H. (2021). ACADEMIC SUPERVISION MODEL IN IMPROVING TEACHER PERFORMANCE. *Journal of Islamic Education Management*, 6, 25-36.