

Research Paper



Supervision and educational research

Tila Paulina¹, Andino Maselena^{2*}, Kemala Sandi Rosa³, Ahmad Luviadi⁴, Yurnalis Etek⁵

^{1,3,4,5}Universitas Islam Negeri Raden Intan, Lampung, Indonesia.

^{2*}Institute Bakti Nusantara, Lampung, Indonesia.

Article Info

Article History:

Received: 17 March 2023

Revised: 23 May 2023

Accepted: 31 May 2023

Published: 14 July 2023

Keywords:

Supervision

Research

Education

Learning Outcomes

Collaborative Approach

Quality of Education



ABSTRACT

Supervision and research are two important things in the world of education. Both complement each other and can improve the quality of teaching and learning. In an effort to increase the effectiveness of both, it is important to adopt a collaborative approach and use appropriate methods in research. In this way, supervision and research can have a positive impact on students, teachers, and the entire educational community. Supervision and research play a very important role in efforts to improve the quality of teaching and learning. The two complement each other and can help us identify problems and develop better solutions. In this increasingly developing era, information and communication technology can be a very useful tool in increasing the effectiveness of both. By applying a collaborative approach, information and communication technology, and appropriate methods in research, we can achieve a better goal of improving the quality of education. In this paper, we will further discuss the relationship between supervision and research in the educational context and strategies that can be implemented to increase the effectiveness of both.

Corresponding Author:

Andino Maselena

Institute Bakti Nusantara, Lampung, Indonesia.

Email: maselenaandino@gmail.com

Copyright © 2023 the Author(s). This is an open access article distributed under the Creative Commons Attribution License, (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. INTRODUCTION

Supervision and research are two things that cannot be separated in the world of education. Supervision can be interpreted as supervision, monitoring, and guidance on teaching and learning activities carried out by the teacher. While research is a scientific activity that aims to develop knowledge and solve

existing problems. In the educational context, research can be conducted to improve the quality of student learning processes and outcomes, as well as to develop more effective learning strategies and methods [1]. Therefore, the role of supervision and research is very important in efforts to improve the quality of education.

Supervision can be carried out by various parties, from school principals, supervisors, subject coordinators, to co-workers. The purpose of supervision is to ensure that the learning process goes well, teachers can implement the curriculum properly, and students can achieve the expected learning outcomes. Supervision can also be carried out to provide input and feedback to teachers in order to improve teaching quality.

Meanwhile, research can be carried out by anyone who has the interest and desire to research a particular phenomenon. Research in education can be conducted to evaluate the effectiveness of an educational program or policy, identify problems faced by students and teachers, and develop better learning methods. In research, it is important to use the right method and collect valid and reliable data [2].

The relationship between supervision and research is very close because they complement each other. Supervision can be a source of problems or challenges that need further investigation. Conversely, the results of research can form the basis for improving existing supervision programs or for developing new, more effective supervision programs. By conducting research, supervision can be carried out more effectively because the data collected can be the basis for providing more specific and measurable input or feedback.

One strategy to increase the effectiveness of supervision and research is to adopt a collaborative approach. Collaboration between teachers, supervisors, and researchers can facilitate knowledge development and better problem solving. By working together, they can share information, experiences and resources that can improve the quality of teaching and learning.

The role of supervision and research in education is very important because they can help improve the quality of teaching and learning. Through supervision, teachers can get guidance and feedback that will help them improve the quality of their teaching. Meanwhile, through research, we can identify the problems faced by students and teachers and develop better solutions to improve the quality of learning.

1.1. Educational Research

1.1.1. Essence of Educational Research

Educational research has two main objectives, namely to develop knowledge about education and to provide a basis for decision-making related to education. Educational research must be carried out using the right scientific method, by collecting valid and reliable data and carrying out appropriate statistical analysis. Educational research must involve an in-depth understanding of the context in which education takes place, and must provide an accurate picture of what is happening on the ground. Educational research must involve stakeholders in the educational research process, so that research results can become the basis for more informed decisions. Educational research must make a positive contribution to educational development. In conducting educational research, it is important for researchers to consider both views and develop an approach that is appropriate to the context and research objectives to be achieved. The development of critical thinking skills can be done through various methods, such as group discussions, problem solving, and research-based projects. Besides that, the teacher's role in developing students' critical thinking skills, namely by providing appropriate challenges and feedback. Research can make an important contribution in developing better education. Educational research can assist in identifying problems faced by students and teachers, as well as developing better solutions to improve the quality of learning [3], [4].

1.1.2. Indicator of Educational Research

Educational research indicators are variables used to measure or assess the educational phenomena studied. This indicator assists researchers in identifying important aspects to be studied and determining appropriate data collection methods. Some examples of educational research indicators

include:

- 1) Academic Achievement: This indicator includes average grades, test scores, graduation rates, and other academic achievements that can be measured quantitatively.
- 2) Student Participation: This indicator includes absenteeism, tardiness, and participation in extracurricular activities or other activities at school.
- 3) Teacher Teaching: This indicator covers the quality of teacher teaching, such as effective use of teaching methods, good interactions with students, and skills in providing feedback.
- 4) Student Satisfaction: This indicator includes students' views of the quality of learning and the school environment, including satisfaction with facilities and other support services.
- 5) Program Effectiveness: This indicator includes evaluation of programs or activities that have been carried out in schools, such as remediation programs, skills development programs, and other programs.
- 6) Educational research indicators must be chosen carefully in order to provide accurate and relevant information in identifying existing problems in the field of education and provide recommendations for appropriate solutions.

1.2. Teachers' Tasks in Educational Research

1.2.1. Essence

The teacher must become a leader in improving the quality of learning in the classroom. Teachers must understand the scientific evidence of effective learning practices and apply them consistently in teaching. In addition, teachers must continue to develop their skills and knowledge through continuous research and professional development. Teachers can conduct research on their own teaching practices to improve the quality of teaching in the classroom [5]. By doing this research, teachers can discover new ways to teach and enhance student learning. In addition, teacher research can also help improve their confidence and professional skills. Teachers must be an integral part of the educational research process. Teachers must take an active role in designing and carrying out educational research, as well as implementing research findings into their teaching [6]. In addition, the authors stress the importance of teachers collaborating with fellow teachers and other researchers in carrying out educational research, as well as participating in educational seminars and conferences to update their knowledge. Overall, the duties of teachers in educational research include being leaders in improving the quality of learning, conducting research on their own teaching practices, and collaborating with fellow teachers and other researchers in conducting educational research. By carrying out these tasks, teachers can improve the quality of their teaching and make a positive contribution to the overall improvement of education [7].

1.2.2. Indicator

Teacher task indicators in educational research are variables used to measure or assess teacher performance in conducting educational research. In educational research, there is a number of example indicator teacher's assignment used for evaluating performance and teacher's impact on the learning process. Following is a number of example indicator:

Quality of teaching: This indicator covers the ability of teachers to develop and implement effective lesson plans. Some examples of indicators of teaching quality are the use of various learning strategies, the use of relevant evaluation methods, and the teacher's ability to explain material clearly and interestingly.

- 1) Teacher-student interaction: This indicator measures a teacher's ability to establish good relationships with students and create a conducive learning environment. Examples of these indicators include a teacher's ability to listen to students, provide constructive feedback, and build a classroom climate that is inclusive and respectful.
- 2) Curriculum development: This indicator assesses the teacher's ability to develop and organize learning materials according to the needs of students and the applicable curriculum. Examples of indicators include the teacher's ability to identify learning objectives, design interesting activities, and adapt the curriculum to the development of students.
- 3) Improved student learning outcomes: This indicator reflects the extent to which teachers can improve

student academic achievement. This can be measured through increasing test scores, progress in assignments or projects, and students' ability to apply the knowledge and skills learned.

- 4) Monitoring and evaluation: This indicator refers to a teacher's ability to regularly monitor student progress, provide feedback, and evaluate learning outcomes objectively. Examples of indicators include teachers' ability to identify individual student needs, develop remedial measures, and use data to make evidence-based decisions.
- 5) Parental involvement: This indicator assesses the extent to which teachers communicate and cooperate with parents of students. Teachers can measure parental involvement through participation in parent-teacher meetings, regular communication, and collaboration in supporting students' academic and social development.
- 6) Professional development: This indicator covers teachers' efforts to improve themselves through training and professional development. Examples of indicators include teacher participation in education-related seminars, workshops or training, as well as the ability of teachers to apply new knowledge and skills in classroom contexts. It is important to note that teacher task indicators can vary depending on the context and objectives of educational research.

1.3. Development of Supervision Through Research

1.3.1. Essence

Development of Supervision through Research is a very important and effective approach in improving the quality of teaching and supervision in educational institutions. Supervision must be a collaborative process between supervisors and teachers in order to achieve effective teaching goals. The development of supervision through research can assist supervisors in identifying teaching problems and providing appropriate solutions to improve teacher teaching practices. In addition, through the development of supervision through research, teachers can learn to be more effective in planning and implementing teaching, so as to improve student learning outcomes [8]. Developing supervision through research, supervisors and teachers need to learn to cooperate and share information openly and honestly. This requires hard work and dedication from all parties involved. However, if done well, the development of supervision through research can bring significant benefits to all parties involved and improve the overall quality of education. Development of supervision through research is an approach that combines the concept of supervision with research methods in order to improve the quality of teaching in educational institutions [9]. According to expert opinion, the development of supervision through research helps supervisors and teachers to understand deeply about how effective teaching can be achieved through research and systematic observation [10].

The development of supervision through research brings significant benefits to educational institutions, both for supervisors and for teachers. This approach allows supervisors to use data and information gathered through research to determine appropriate supervision policies and assist teachers in improving their teaching practices. In addition, the development of supervision through research can also help to increase collaboration between supervisors and teachers in achieving effective teaching goals. In developing supervision through research, a research approach is used to improve teaching practice through observation and systematic data collection. The results of this research are used to develop supervision strategies that are more effective in assisting teachers in developing their teaching practices. Thus, developing supervision through research helps to create a more effective learning environment for students and improves the overall quality of education [11]. Overall, the development of supervision through research can help to improve teaching quality and supervision effectiveness in educational institutions. This approach allows supervisors and teachers to improve their teaching practice through research and systematic observation and increases collaboration between them. Therefore, it is important for educational institutions to implement this approach as part of an effective teaching development strategy [12].

1.3.2. Indicator

Several indicators that can be used to measure the success of the development of supervision

through research include:

- 1) Active participation of teachers: One indicator of success is the level of teacher participation in the development of supervision through research. The more teachers are involved and active in this process, the more likely the outcome will be successful.
- 2) Improving teaching quality: Another indicator is improving teaching quality. Development of supervision through research should aim to improve the quality of teaching in the classroom and student learning outcomes. Therefore, it is necessary to carry out an evaluation to measure the improvement in the quality of teaching and student learning outcomes.
- 3) Application of research results: In addition, an indicator of success also lies in the application of research results in teaching and supervision practices. If research results can be integrated into teaching and supervision practices, then this indicates the success of developing supervision through research.
- 4) Supervisor involvement: Supervisors should also be actively involved in developing supervision through research, including by providing teachers with the necessary support and resources. The involvement of a good supervisor can increase the success of developing supervision through research.
- 5) Evaluation and feedback: Finally, indicators of the success of the Development of Supervision through Research are evaluation and feedback. Continuous evaluation and feedback provided to teachers and supervisors can assist in continuous improvement and development [13].

1.4. Islamic Concept of Development Interests

1.4.1. Essence

The concept of Islam plays an important role in the development of educational supervision. Islam provides guidelines and values that can be used as guidelines in the development of educational supervision. In Islam, education is considered as part of the human task of caring for the earth and building life on it. Therefore, educational supervision must be oriented towards achieving educational goals that are in line with Islamic values, such as justice, equality, and togetherness. Islamic concepts can also be used as a basis for designing religion-based educational supervision programs, such as developing educational curricula that are in accordance with Islamic teachings and applying teaching methods that are in accordance with Islamic principles [14], [15].

Islamic concept can be the foundation for the development of quality educational supervision. Islam teaches that education is the right of everyone, regardless of race, religion or gender. This must be used as a principle in the development of inclusive and equitable educational supervision. Islamic concepts can also be used in designing educational supervision programs that aim to shape the character of quality students, such as developing character, example, and a sense of empathy. In addition, Islamic-based educational supervision can improve the quality of teaching and learning by applying a holistic and multidimensional approach [16], [17]. In developing Islamic-based educational supervision, Islamic concepts must be integrated with the general principles of educational supervision. The concept of Islam is not only the basis for designing religion-based educational supervision programs, but must also be applied in the daily practice of educational supervision. Islamic-based educational supervision must be able to increase teacher professionalism and the quality of student learning, as well as strengthen religious values in education. In this case, the concept of Islam is important as a basis for the development of quality and sustainable educational supervision [18].

1.4.2. Indicator

There are several indicators of developing teacher supervision through action research, including:

- 1) Identify the need for supervision: Effective supervision requires a clear understanding of the needs of teachers and students. In action research, teachers and supervisors can work together to identify supervision needs related to teaching and learning in the classroom.
- 2) Improvement of teachers' reflective abilities: Action research can help teachers to improve their reflective abilities about teaching and learning. This can be achieved by encouraging teachers to reflect

on their teaching practices, evaluate the effectiveness of teaching methods, and take action to improve the quality of their teaching.

- 3) Use of data and empirical evidence: Action research can help supervisors and teachers to use data and empirical evidence in making supervision decisions. By monitoring student performance and learning outcomes, teachers and supervisors can use this data to identify problems and develop effective strategies to improve the quality of teaching and learning.
- 4) Team collaboration: Action research promotes collaboration between teachers and supervisors. Teachers and supervisors can work together to design and carry out action research, analyze data, and formulate recommendations for future supervision development.

These indicators can help supervisors and teachers to improve their supervision, improving student performance and overall quality of education.

2. CONCLUSION

The development of supervision through research is an effective approach in improving the quality of teacher supervision and performance. In this context, action research can be an appropriate method for developing educational supervision. Action research can help supervisors and teachers improve their reflection and problem-solving skills, as well as improve the quality of teacher supervision and performance. Indicators of the success of educational supervision and research include teacher involvement in supervision and research processes, use of empirical evidence in making decisions, development of teacher professional skills, as well as reflection and problem-solving skills. Therefore, supervisors and teachers need to be actively involved in the process of supervision and research, and use empirical evidence and data to make decisions and improve teacher performance. In the context of developing supervision through research, an Islamic-based approach can also be adopted as an important concept in improving the quality of educational supervision. The concept of Islam can assist in improving educational supervision, including in terms of strengthening Islamic morality, ethics and values. Therefore, supervisors and teachers need to pay attention to Islamic concepts as part of the development of effective and sustainable educational supervision. Based on an Islamic perspective, the development of supervision through research is an important matter in improving the quality of education. Supervision and research based on Islamic principles can help improve morality, ethics, and Islamic values in the process of supervision and teaching. In addition, in developing supervision and research, supervisors and teachers must pay attention to Islamic principles as a guide to ensure the success of the supervision and research approach. In this case, the development of continuous supervision and research can be achieved by paying attention to Islamic principles and improving the quality of teacher supervision and performance.

Acknowledgments

The authors have no specific acknowledgments to make for this research.

Funding Information

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
Tila Paulina	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓
Andino Maselena	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Kemala Sandi Rosa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Ahmad Luviadi	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Yurnalis Etek		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓

C : Conceptualization	I : Investigation	Vi : Visualization
M : Methodology	R : Resources	Su : Supervision
So : Software	D : Data Curation	P : Project administration
Va : Validation	O : Writing - Original Draft	Fu : Funding acquisition
Fo : Formal analysis	E : Writing - Review & Editing	

Conflict of Interest Statement

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Informed Consent

All participants were informed about the purpose of the study and their voluntary consent was obtained prior to data collection.

Ethical Approval

Not Applicable.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

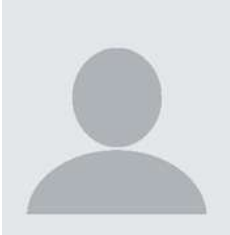
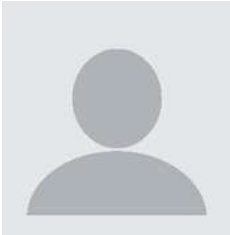
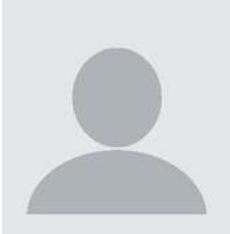
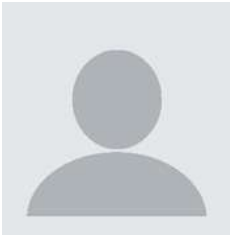
REFERENCES

- [1] Abdul Muis Said, Education Supervision Paradigm, Jakarta, Grafindo, 2018
- [2] Amoako, KO 'Supervision and teacher professional development: A review of literature', Journal of Educational Research, vol. 112, no. 3, 2019.
- [3] T. A. Brush, Teacher Research and Educational Reform: Ninety-Second Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, 1993.
- [4] N. Fatimah, 'Developing the Concept of Islamic-Based Supervision to Improve the Quality of Education', International Journal of Education and Research, vol. 8, no. 4.
- [5] T. R. Guskey, Professional development and teacher changes. Teachers and Teaching, vol. 8. NKMR Press New York, 2002. doi.org/10.1080/135406002100000512
- [6] S. Ibrahim, 'The Role of Islamic Education in Teacher Supervision', International Journal of Applied Linguistics and English Literature, vol. 7, no. 4, 2018.
- [7] C. Jhoice, Visible learning for teachers: Maximizing impact on learning, Routledge. New York, NY, 2021.
- [8] J. Hattie, Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement. New York and London, 2008.
- [9] J. W. Best, Research in Education, Person. Upper Saddle River, New Jersey, 2019.
- [10] J. W. Best, 'Research in Education, Prentice-Hall, Upper Saddle River', 2006.
- [11] J. C. Fine and T. R. Guskey, Evaluating Professional Development. Thousand Oaks, Calif: Corwin Press, 2017.
- [12] 'The Development of Teacher Supervision through Action Research', Journal of International NTM India, 2015.
- [13] D. Mardiana, 'The Importance of Action Research in Teacher Supervision', International Journal of Linguistics, Literature and Culture, vol. 7, no. 1.
- [14] R. Stake, The Art of Case Study Research. Thousand Oaks, California, United States, 1995.
- [15] P. Subandowo, 'The Development of Teacher Supervision through Action Research', International Journal of Evaluation and Research in Education, vol. 10, no. 1.
- [16] C. Sun and Y. Chang, 'The role of instructional supervision in promoting teacher innovation and creativity: Evidence from Chinese schools', Journal of Educational Research, vol. 114, no. 2.
- [17] Van Cleef 'DW The role of instructional supervision in promoting research-based teaching practices',

- Journal of Educational Research, vol. 111, no. 4, 2018.
- [18] Q. Yusuf, 'The Implementation of Supervision in Improving the Quality of Education', International Journal of Advanced Science and Technology, vol. 28, no. 16, 2019.

How to Cite: Tila Paulina, Andino Maselena, Kemala Sandi Rosa, Ahmad Luviadi, Yurnalis Etek. (2023). Supervision and educational research. Journal of Learning and Educational Policy (JLEP), 3(2), 6-13. <https://doi.org/10.55529/jlep.34.5.12>

BIOGRAPHIES OF AUTHORS

	Tila Paulina , is a researcher who is attached to Universitas Islam Negeri Raden Intan Lampung, Indonesia. In her daily work she mostly focuses on educational management, the supervision of instruction, teacher professional growth, and also educational research. She has taken part in several studies about how to raise or improve education quality, especially by using supervision that really works and through a collaborative way of doing classroom learning and teaching.
	Andino Maselena , is an Indonesian researcher, he is affiliated with Institut Bakti Nusantara in Lampung, Indonesia. His work goes across educational technology and also artificial intelligence, including decision support systems and data mining. He also focuses on machine learning, fuzzy logic, and information systems in general. Over time he has authored quite a lot of publications in international journals and conferences, especially around intelligent systems and their use in education, healthcare, and for everyday decision making. Sometimes people mention his contributions as really tied to practical applications, and maybe that's because he keeps returning to those themes, again and again. Email: maselenaandino@gmail.com
	Kemala Sandi Rosa , is a faculty member, and researcher at Universitas Islam Negeri Raden Intan Lampung, Indonesia. Her research interests are tied to educational administration, curriculum development, teacher supervision, and improving instructional quality too. She has taken part in collaborative studies about educational innovation and strengthening teaching learning processes, which sometimes feels more and more important.
	Ahmad Luviadi , affiliated with Universitas Islam Negeri Raden Intan Lampung, Indonesia. His academic focus is on educational research, instructional management, teacher performance, and educational supervision. He has been involved in collaborative work that seeks to raise educational quality using evidence-based teaching practices and proper supervision, in a structured way.
	Yurnalis Etek , is a researcher at Universitas Islam Negeri Raden Intan Lampung, Indonesia. His research interests include educational leadership, supervision, learning evaluation, and quality assurance within education. He has contributed to joint research on how to enhance teaching effectiveness, as well as educational results through systematic supervision and research, step by step, really.