

Individual Technical Academic Supervision Using Digital Technology

Rusmaniar¹, Tri Widiyatsih², Herry Setiyo²

¹SMP Negeri 4 Kayuagung, OKI, Indonesia, ²Universitas PGRI Palembang, Indonesia

Corresponding author e-mail: rusmaakhyar@gmail.com

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Abstract: The education sector is currently undergoing changes toward digitization, because of technological developments and the impact of the pandemic. In the supervision sector, learning quality is inextricably linked to these demands. As a result, school principals' primary option for facilitating academic supervision implementation is digitization. The purpose of this research is to examine the implementation of individual technical academic supervision based on digitalization in junior high schools. The qualitative method was used in this study. Data collection methods include observation, interviews, and a review of the literature. The descriptive qualitative analysis was used to analyze the data. The principal used digital-based instruments to carry out several individual supervision activities such as class visits, class observations, individual meetings, inter-class visits, and self-assessment. Digital-based academic supervision activities are more focused on a comprehensive assessment of the quality of teacher assignment implementation rather than just administrative completeness. The use of digital instruments in the delivery of individual technical academic supervision has a positive impact on learning quality.

Keywords: Academic Supervision, Digitalization, Individual Technical

A. Introduction

As a result of technological advancements and the impact of the pandemic, the education sector is currently undergoing changes toward digitization. Technological advancements have altered people's perspectives and expectations of what will be accomplished (Syafri, 2019). Because of the pandemic's impact, school administration systems, students, parents, and teachers must transition to digital learning systems (Ali et al., 2021). In short, digital technology is now being used in all aspects of education (Ma'rufah, 2022).

As a result, maximum effort is required to improve the competence of educational resources, particularly teachers, who serve as the spearhead of the school's core activities. Schools require teacher resources who are competent and prepared for the new system. One way to improve teacher competence is to implement effective academic supervision that addresses individual teacher issues

(Ajasan et al., 2016). Implementing effective academic supervision is not the same as supervision that leads to inspections, where supervisors find teacher mistakes without coaching or improvement. Effective academic supervision, that is, supervision that addresses the issues that teachers face, can influence the improvement of work quality. The higher the quality of academic supervision implementation, the higher the teacher's performance in learning activities (Amanda et al., 2017; Purbasari, 2015). The individual technique, which refers to the identification of teacher problems and needs, is one of the academic supervision techniques that can be used (Ajasan et al., 2016). The digitization system may be a practical and efficient choice for its implementation. Principals can use existing technology as media and instruments to carry out more practical academic supervision activities such as development, coaching, compensation, and supervision (Suyatno, 2020). According to the findings of Khilmiyah et al., (2021), mastery of the Android-based Academic Supervision Application Software makes supervisors feel solid, comfortable, easy, and happy in carrying out their responsibilities as academic supervisors to improve teacher performance.

SMP Negeri 4 Kayuagung, based on observations, has adequate infrastructure and resources to carry out digital-based individual technical supervision activities to supervise teacher performance. Supervision will promote academic quality improvement by improving learning conditions through academic forms (rather than just substantive physical problems) (Kodariah, 2016). The purpose of this research is to examine the implementation of digitally-based individual technical academic supervision in junior high schools.

Individual Technical Academic Supervision

Supervision includes oversight of academic activities such as teaching and learning processes, oversight of teachers while teaching, oversight of students who learn, and oversight of situations that cause it (Suhardan, 2010). The goal of supervision is to ensure that teachers can fully discharge their duties and responsibilities. According to (Sahartian, 2000), the primary function of supervision is to improve teaching and learning situations in schools.

Academic supervision focuses on supervisors' observations of academic problems, specifically things that are directly in the learning activity environment when students are in the learning process (Suhardan, 2010). The academic supervision activities are divided into four stages: (1) assessment of the implementation of the tasks of the object being supervised; (2) assessment of deficiencies based on research data; (3) improvement by providing guidance and instructions to overcome teacher weaknesses; and (4) coaching with activities to foster a positive attitude in teachers so that they can assess themselves and try to improve themselves toward the formation of skills (Nawawi, 2005).

Individual technical academic supervision is supervision carried out individually, some of the activities carried out include: (1) conducting class visits, the principal comes to class to observe how the teacher teaches to see what deficiencies or

weaknesses need to be corrected; (2) conducting observation visits; (3) Guiding teachers on ways to study students' personalities or overcoming problems experienced by students; (3) Guiding teachers in matters relating to the implementation of the school curriculum, including preparing semester programs, creating unit lesson programs, organizing class management activities, carrying out learning evaluation techniques, using media and resources in the teaching and learning process, and organizing student activities in the extracurricular field (Afriansyah, 2019). There are five types of individual supervision techniques, namely: (1) class visits, (2) class observations; (3) individual meetings; (4) class visits; and (5) self-assessment (Sopian, 2019).

School principals can supervise, monitor, assess, and evaluate each teacher's performance through individual academic supervision activities. Individual academic supervision results can also be used as a tool to assess each teacher's level of work reality in managing learning effectively and efficiently.

B. Methods

The descriptive qualitative approach was used in this study, which was conducted at SMP Negeri 4 Kayuagung. The key informants were school principals, teachers, and students from SMP Negeri 4 Kayuagung OKI Regency. Data collection methods include interviewing, observing, and documenting. The purpose of this study is to investigate and document the process of individual technical academic supervision at SMP Negeri 4 Kayuagung. Data analysis employs qualitative data analysis, which organizes data, sorts it into manageable units, synthesizes it, searches for and finds patterns, discovers what is important and what is learned, and what can be communicated to others (Moleong, 2014). The research stages are based on theory (Miles and Huberman, 2013), with the first stage collecting all data using predetermined data collection techniques. Data reduction is the second stage. The researcher summarizes or searches for key points in the data collected. The third stage is data presentation, in which the compiled data is presented systematically. The final stage is drawing conclusions and verifying the findings, which are then described in the form of a report.

C. Results and Discussion

Results

Researchers' data collection methods included observation, documentation, interviews, and a review of the literature on the implementation of digital-based individual technical academic supervision. Individual academic supervision is carried out in three stages: 1) planning, 2) implementation, and 3) evaluation of the implementation of individual technical academic supervision, which includes: (1) class visits, (2) class observations, and (3) teacher evaluation. According to the findings, the school principal's planning for individual technical academic supervision begins with the creation of a digital-based supervision program by

preparing supervision instruments and the media used, namely cameras, google form applications, google drive, zoom, and mobile device applications. other androids. The goals of this academic supervision activity are to improve teacher performance and learning quality. Because academic supervision activities must adhere to the study schedule and academic calendar, the supervision schedule is created based on the school's teaching schedule and academic calendar. As a result, the academic supervision program is developed in accordance with the academic calendar and study schedule in each class.

Individual academic supervision is structured in an assessment format based on teacher achievement criteria assessed from 5 (five) achievement components: 1) achievement of student learning motivation (assessed through observation); 2) achievement of student learning outcomes (achievement of mastery learning); 3) learning quality (lesson planning, implementation, and evaluation); 4) teacher competency; and 5) student achievement (academic and non-academic). The prepared supervision implementation instrument consists of six instruments: 1) a learning device administrative assessment instrument; 2) an RPP assessment instrument; 3) a learning implementation assessment instrument; 4) a learning evaluation assessment instrument; 5) follow-up instruments; and 6) a teacher performance assessment instrument.

Assessment instruments and supervision schedules can be accessed by teachers through the Google Drive application, and teachers can fill in the required data through the Google form that has been provided, such as supporting instruments in the form of observation instruments, administrative documents, learning process, observation instruments of learning implementation plans, and instrument. The school principal's implementation of digital-based supervision still refers to the principles of implementing supervision (Result of interview with the school principal on 10 October 2022).

The principal's implementation of academic supervision includes teacher teaching planning, teacher teaching implementation, and teacher teaching evaluation. The principal has created supervision tools to aid in academic supervision. Furthermore, when conducting observations, school principals use digital media such as voice recorders and/or cameras. The goal of utilizing information technology is to make academic supervision implementation more efficient. Academic supervision tools tailored to the needs of teachers.

The school principal implements supervising teacher learning plans at SMP Negeri 4 Kayuagung by supervising the administration of teacher learning tools, including the assessment of effective lesson plans that refer to the new paradigm curriculum. Before beginning an assessment, the teacher uploads all administrative documents for the learning devices that will be evaluated. The principal then conducts an assessment using the assessment instrument. The use of digital media to implement administrative supervision of learning tools for teachers at SMP Negeri 4 Kayuagung is more effective than the manual method. Where the teacher can complete the assessment points on the supervision instrument in a more effective and efficient

manner. The school principal can monitor each teacher's administrative completeness and identify deficiencies using the media that has been provided. As a result, administrative shortcomings serve as a resource in the implementation of coaching, particularly in the preparation of learning administration (Results of interviews with the principal of SMP Negeri 4 Kayuagung on October 10, 2022).

Class visit activities are carried out online via video calls in accordance with the teaching hours schedules of the teachers who will be supervised in order to monitor the ongoing teaching and learning process. The class visit process went more quietly and did not disrupt the learning process. The teacher's learning administration documents can also be properly checked by the school principal (Results of interview with the school principal on 10 October 2022).

The implementation of learning process supervision is carried out in accordance with a schedule that has been confirmed and approved by the principal and teacher. The principal observes the teacher's teaching activities while learning supervision is being implemented. Learning supervision begins with inviting the teacher to prepare lessons in class in full, beginning with the opening, core, and closing. The principal monitors every activity performed by the teacher via a video call connected to the projector (Results of interview with the principal on 10 October 2022). The class visit supervision schedule has been agreed upon in advance so that the teacher feels at ease and prepared to be supervised. The results of the school principal's assessment will then be given to the teacher in question, along with notes that must be corrected (Results of an interview with the teacher of SMP Negeri 4 Kayuagung on October 15, 2022).

Following the completion of lesson plan supervision, execution, and learning evaluation. The principal then provides feedback to the teacher in order for the teacher to improve his professionalism and performance based on several problems identified by the principal through supervision instruments. These findings are expected to spark discussion among teachers and principals as they seek solutions to improve teacher performance in the future. The outcomes of the supervision of lesson plans given to teachers become materials for teacher improvement, particularly in the administration of learning tools that are in accordance with the curriculum used, namely the new paradigm curriculum.

In terms of learning implementation, the principal provides input on the efforts and activities of teacher-students in the learning process; how to use teaching media; a variety of learning methods; the accuracy of using media with material; the accuracy of using the method with; learning objectives; student interaction in the learning process; assessment methods/strategies and their effectiveness in improving the process of achieving learning objectives. This component then serves as the foundation for the teacher to make improvements with various problems based on the results of learning implementation supervision. The results of individual academic supervision analysis, which includes the results of examining lesson planning, the results of learning implementation, and the results of learning assessments, can be useful as material for providing feedback and follow-up plans. It is critical for each

teacher to provide feedback in order to improve the quality of the teaching and learning process. The goal of the principal's individual academic supervision is to help teachers become more skilled and capable in carrying out their responsibilities. Furthermore, to encourage teachers to be creative in the teaching and learning process.

Discussion

According to the findings of the study, the implementation of individual technical academic supervision involves four stages: 1) planning; 2) implementation of class visits; 3) evaluation of supervision results; and 4) follow-up on supervision results. Ajasan et al., (2016) stated in their research findings that the implementation of academic supervision by the school principal was carried out in three stages, namely the initial survey, class visits to determine the course of learning, reviewing the results of class visits and providing appropriate solutions to overcome problems faced by teachers, and evaluation of academic supervision implementation includes evaluation of job descriptions and evaluation of document elaboration.

The principal uses digital-based instruments to carry out individual supervision activities such as class visits, class observations, individual meetings, inter-class visits, and self-assessment. Digital-based academic supervision activities are more focused on a comprehensive assessment of the quality of teacher assignment implementation rather than just administrative completeness. The use of digital tools in the implementation of individual technical academic supervision improves the quality of learning at SMP Negeri 4 Kayuagung.

In addition to being more efficient, the implementation of digital-based individual technical academic supervision enables teachers to work more effectively and efficiently. Individual supervision is used in SMP Negeri 4 Kayuagung through class visits, observations, individual talks, and discussions about problems encountered by teachers during the implementation of teaching and learning. The principal also creates digital-based supervision tools by utilizing commonly used digital media at SMP Negeri 4 Kayuagung, such as cameras, Google forms, Google Drives, zoom, and applications on other electronic devices. With this digital-based instrument, the implementation of class visits to observe teachers at work runs more effectively and efficiently, because even if they don't come directly, the principal can see directly assessing the implementation of learning based on assessment components such as tools, methods, and teacher skills in teaching, as well as directly monitoring how teachers motivate students in learning. The findings of this study are supported by research from (Saleh, 2020) that school principals use technology to carry out academic supervision of class visits; in this case, the principal directly observes learning activities in class. When providing guidance to educators, the principal then uses private meeting technology.

The principal gave an assessment and notes on what notes the teacher needed to fix based on the results of the digital media visit. The principal then gives the assessment results to the teacher, who immediately studies and examines their perceived strengths and weaknesses. As a result, in order for this feedback process to

run smoothly, the principal requests that the teacher be able to set a time for a small meeting to discuss the results of the supervision assessment and to communicate directly to hear input from the teacher. Following the submission of the evaluation results, the results of academic supervision are followed up on. The principal gives the teacher enough time to review the results of the principal's assessment via the supervision instrument, and the principal hopes that with this ideal time, the teacher will be able to immediately correct the problems identified by the supervision results. According to Suryani (2015), supervision activities can provide motivation for teachers to always increase knowledge in order to become professional teachers in carrying out learning.

D. Conclusions

Individual technical academic supervision activities carried out by the principal such as class visits, class observations, individual meetings, inter-class visits, and self-assessment are carried out by the principal using digital-based instruments such as the Google form, Google drive, zoom, and applications on other android devices, according to the findings of the research and discussion. Individual technical academic supervision provided by the school principal has been effective in increasing teachers' ability to carry out learning activities. Individual technical academic supervision implementation begins with planning academic supervision carried out by the school principal and proceeds through several stages, namely 1) planning; 2) implementation; 3) evaluation; 4) evaluation results feedback; and 5) follow up.

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