The Principal's Efforts to Overcome the Problem of Teaching and Learning in the Field of Science

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Abstract: The focus of this research problem is to determine how the principal's efforts to overcome the problem of teaching and learning activities at SMAN 9 Tana Toraja. The purpose of the study was to find out the causes: the teacher often gave notes to students while the teacher concerned hung out outside the classroom, and the principal's efforts to overcome so that this incident did not run continuously; there is a lack of cohesiveness between fellow teachers and the principal's efforts to overcome so that teachers can work together, establish family relationships so that the school goals can be achieved; teachers copy the learning tools and the principal's efforts to overcome the teacher's copying of learning tools; students hang around a lot during class hours and the principal's efforts to overcome this situation. Research method: observation, interview, documentary. Findings: 1). Teachers often give notes to students because the classroom atmosphere is bland, students act less respectfully of teachers, the principal does not supervise teachers, teaching materials are lacking, and teachers who teach are not by their educational background. 2). Lack of communication between teachers, rare family gatherings, and jealousy between fellow teachers. 3). Almost all teachers copy other teachers' learning tools. 4). Lack of supervision, picket teachers, are less active in controlling the situation at school. Conclusion: homerooms need to organize classrooms neatly, maintain cleanliness, and discipline students, principals must control regularly, and make joint rules about discipline in class when teachers carry out teaching and learning processes HP is disabled, fulfillment of facilities and infrastructure, holding training, 2. Holding family meetings; 3. teachers make their learning tools through MGMP; 4. Picket work by the task.

Keywords: Commitment and responsibility; Learning; Science

Introduction

One indicator of a school's success in carrying out its mission as an institution that prepares professional and quality graduates who can fill development needs at present and in the future is the effective and efficient implementation of Teaching and Learning Activities (known as KBM). As human resources in schools, teachers have a very decisive role and are the key to success in achieving educational goals because teachers are managers of implementing KBM for students (Hamid, 2017) explained that teachers have an essential role in the success of learning, so they must have the professionalism and a qualified attitude in organizing KBM. In addition, the challenges of 21st-century learning require teachers who master pedagogical competencies, especially those related to efforts to produce KBM that can facilitate the acquisition of 21st-century skills for students (Akbar, 2021). Mastery of these competencies must be possessed by every teacher, including science teachers in high school (Biology, Physics, and Chemistry).

Science teachers have their own challenges in conducting teaching and learning activities because science lessons have unique characteristics regarding the scientific approach that needs to be applied in every science-based learning process, such as learning biology, chemistry, and physics in high school. The implementation of KBM demands the professionalism and competence of teachers in organizing,

implementing, evaluating, as well as following up on the results of the evaluation of KBM for continuous and optimal improvement. Amil et al. (2019) reported that the pedagogic competence of teachers in implementing the scientific approach had an effect on the learning process in the classroom.

KBM needs to be planned, implemented, assessed, and evaluated (Afandi, 2015). The planning process involves preparing learning tools tailored to the characteristics of students and the curriculum demands and specifications of the subjects being taught. The implementation process is related to the implementation of planning activities. KBM Planning and Implementation activities require an assessment and evaluation stage to check whether the activity has been running following the stated objectives, including finding aspects that need to be improved in each activity so that it becomes the basis for improvement for the next cycle so that it can produce quality and sustainable KBM.

Teachers experience problems in organizing KBM. Such as obstacles in making learning tools (Dewi et al., 2017), in the learning process (Priyayi et al., 2018), as well as in learning assessment (Kamiludin & Suryaman, 2017). Every obstacle or problem experienced by the teacher needs to be paid attention to by every party, especially the principal. The principal has an essential role in efforts to overcome the problems of teaching and learning experienced by teachers to produce quality teaching and learning activities. Academic supervision is activities carried out by school principals to assess and check the implementation of KBM organized by teachers to ensure the achievement of learning objectives that have been set.

There is a relationship between academic supervision and teacher pedagogic competence (Hayudityas & Sanoto, 2021). Academic supervision competence is a supervisory function about the implementation of the tasks of coaching, monitoring, assessing, and training professional teachers in (1) planning learning; (2) carrying out learning; (3) assessing learning outcomes; (4) guide and train students, and (5) carry out additional tasks attached to the implementation of the main activities following the workload of a teacher (Astuti, 2017). Supervision activities carried out by school principals are related to the importance of improvements made to the findings in these supervision activities to be followed up by school principals to assist teachers in overcoming problems in learning activities.

Various studies have shown that supervision activities can improve the quality of school teaching and learning processes. Saiful Bahri (2014) suggests that academic supervision can help teachers to develop their abilities to help students achieve learning goals. This process helps the principal to know the position of the teacher in conducting learning as well as to find out the obstacles experienced by the teacher in conducting KBM so that it is expected to be a way for the principal to follow up on the difficulties faced by the teacher so that these problems can be resolved and student learning objectives can be achieved.

Various schools have particular problems, especially in organizing KBM. This is due to the diverse characteristics possessed by each school, ranging from the diverse characteristics of students, the character of the teachers, the availability of school facilities and infrastructure, the support of the school committee and the government, the financial capacity of the school, to the ability of the principal in lead and direct school programs. The diversity of school conditions causes every school principal to pay close attention to the conditions of learning in his school and further provide directions and assistance so that all components in the school can function optimally, without exception at SMAN 9 Tana Toraja.

Based on observations made at SMAN 9 Tana Toraja, various problems related to the teaching and learning process were found, including (1) the diversity of abilities of science teachers in the learning process and mastery of knowledge; (2) the absence of an accurate measuring tool to determine the ability of teachers; (3) teachers teach not in their field of expertise; (4) facilities and infrastructure is inadequate or very lacking; (5) learning tools by teachers are not appropriately prepared, and (6) inadequate teacher welfare. Based on the description, the focus of the research problem is "The Principal's Efforts to Overcome the Problems of the Teaching and Learning Process at SMAN 9 Tana Toraja".

The problem in this research is: How is the principal's effort to overcome the science teacher who often gives notes to students while the teacher concerned hangs out outside the classroom?; How are the principal's efforts to deal with teachers who are not cohesive?; How are the principal's efforts to overcome the confusion of learning tools by teachers?; How are the principal's efforts to deal with students wandering around a lot during class hours?

Method

The research method used is descriptive qualitative; according to (Sugiyono, 2019), the qualitative descriptive research method is "Research that uses natural object conditions (as opposed to experiments) where the researcher is the key instrument, data collection techniques are carried out by triangulation (combined), data analysis is inductive and qualitative research results emphasize meaning rather

than generalization. The stages in this research can be seen in the following figure 1.
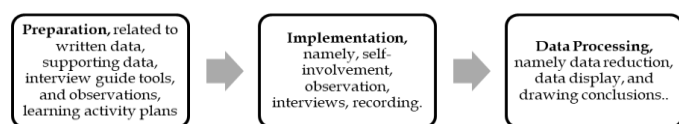

Figure 1. Research Stages

In the context of this research, it is to observe, describe, evaluate, and make decisions for the smooth running of the teaching and learning process at SMAN 9 Tana Toraja. Research subjects are not always people but can be activities and places. The subject of this research is focused on teachers and students at SMAN 9 Tana Toraja. Data collection techniques, namely observation, are defined as "Systematic observation and recording of the symptoms that appear on the object of research." This opinion is in line with Nazir (1983), who states that data collection by observation is a way of collecting data by using the eyes to observe something. Researchers will directly observe the activities of teachers and students in teaching and learning activities; in this way, it can be seen directly what problems occur in the learning process.

The collection of secondary data and primary data using the interview method. According to Kartini (1990), interviews can also be used to convert various information directly given by the subject into data and to reveal experiences that have been experienced by research subjects in the past and experiences experienced today. According to Sukardi (1998), "Interviews can also be used to change various information directly given by the subject into data and can also be used to reveal experiences that have been experienced by the subject in the past as well as experiences experienced at this time." Researchers will conduct direct interviews with teachers and students in school teaching and learning activities.

Data collection with documentary techniques; Surakhmad (1985) states, "Documentation is a written report of data from an event whose contents consist of an explanation or estimate of the event and is written and stored intentionally to make it easier to find it again for use in the future." In this case, the document to be taken is in the form of a learning device by the teacher.

Result and Discussion

Teachers Often Give Notes to Students

Based on interviews conducted by researchers with several teachers who often give notes to students, it is known that the cause of teachers often giving notes to students is because teachers feel bored with class conditions, unappreciated by students, and teachers feel

unsupervised. Hence, they do their will, and teaching materials are very lacking so that teachers cannot develop lessons; some teachers are less enthusiastic about teaching because the subjects they teach are not following their educational background. From the observations made, namely by visiting the classroom, it is known that there are teachers whose work is only to give notes to students while the teacher concerned is outside the classroom, come hang out with teacher friends; some enjoy playing with cell phones.

Following the results obtained, the steps that can be taken are as follows: (1) the teacher feels bored in class; so that teachers do not feel bored in class, it is obligatory for the homeroom teacher to arrange the classroom neatly, maintain cleanliness, and discipline students. The principal will regularly control the tasks given to their respective homerooms. This is in accordance with the opinion of To et al., (2021) that it is very important for the principal to supervise teacher activities (2) teachers feel unappreciated by students; principals, students, 11K coordinators, and homeroom teachers make joint rules regarding discipline in class, and whoever violates these rules will be penalized according to the rules that have been made, such as students who are not polite to teachers, they will be given guidance and if they still repeat then people will be punished. student parents will be called. (3) the teacher feels unsupervised so that the teacher feels free; the steps to be taken are teachers who often give notes to students or who often leave class will be called and given a warning; when the teacher carries out the teaching and learning process HP is deactivated; The principal must control the teacher to class every day or by controlling it via CCTV (Wahyudin, 2018) and if the teacher still gives notes to students without a proper reason, they will be called and reprimanded starting from verbal to written warnings (Kurniawan & Hasanah, 2021). (4) less teaching materials; The school principal tries his best to meet the needs of school facilities and infrastructure (Widiansyah, 2018), especially books and other learning media, proposes fulfillment to the South Sulawesi Provincial Education Office, and proposes fulfillment to the Center. (5) Teachers who teach not according to their educational background will prioritize to include training to increase their competence (Sulistyo et al., 2016) at the Regency, Provincial and Central levels, and teachers who teach not according to their educational background will be accompanied by teachers who are by their educational background or with *team teaching*.

For the smooth teaching and learning process in schools, it is necessary to manage schools by more real principals and implement good school management, as stated by Sallis (1993), (Chan, 2018), and (Mukhtar et al., 2020) explaining that there are several leading roles of principals in developing a quality culture of managing

effective educational institutions, including: (1) having a clear vision of integrated quality for the organisation (Sukaningtyas, 2017) ; (2) have a clear commitment to quality improvement (Rohman, 2017); (3) communicating the message of quality; (4) ensure that the customer's material needs become the centre of the organisation's policies and work; (5) lead developing staff; (6) be careful not to hand over to others when problems arise without seeing evidence as many problems arise from agency policy and not from staff fault; (7) directing innovation within the organisation; (8) ensure that the clarity of the organisational structure defines responsibilities and provides appropriate and maximum delegation; (9) have a firm attitude to remove deviations from the organisational culture; (10) building active working groups; (11) and establish appropriate mechanisms to monitor or evaluate success.

According to (Marienda et al., 2015) and (Altawaty et al., 2020), The principal is the key to the school's success in making changes. So that activities to improve and improve programs and learning processes in schools mainly lie with the principal himself. Furthermore, it is said that principals have roles and responsibilities as education managers, educational leaders, educational supervisors, and education administrators. According to Government Regulation No. 100 of 2000, competence is the ability and characteristics of a civil servant in the form of knowledge, skills, and behavioral attitudes required to carry out his duties. Meanwhile, according to Baso (2003: 3), competence is a description of the main skills, knowledge, and attitudes needed to achieve effective performance in work.

There is a lack of cohesiveness between fellow teachers

Based on observations, it can be seen that some teachers are simply greeted without joking and seem to ignore each other. Some teachers work individually, others don't care about their colleagues, and some even influence their friends who work. That's why we have to do it, it does not work. Even though the work requires the help of other people, such as picket teachers who work on pickets, other teachers should also help supervise students and reprimand students who violate them. Still, they refuse to say I'm not the picket; it's a picket business. After approaching and conducting interviews with the teacher in question, it was found that the causes of incompatibilities between teachers were; variations in age. Some feel that they are more senior, so they need to be appreciated more by the easy ones. They feel more experienced and know more, so the younger ones feel that they are considered unappreciated by the seniors, lack communication, come from various disciplines so prestige with the knowledge they have, do not cooperate with each other, there are feelings of envy

towards fellow teachers, for example, if there are teachers who are diligent and those who are not diligent, there are those who feel they are not treated the same as other teachers.

Lack of cohesiveness also causes the process of teaching and learning activities not to run smoothly. Therefore the principal will hold a family meeting every month to provide opportunities for teachers to convey what their problems or proposals are, provide understanding for each teacher so that misunderstandings do not occur, provide tasks without discriminating against teachers so that jealousy does not occur, guiding teachers, if there are teachers who do not get along with other teachers then the principal will solve it in the best way for the teacher, call the teacher and look for the problem and then give a solution.

Teacher Learning Tools

Based on observations, it is known that most teachers, even almost all teachers, copy other people's learning tools. do not make their own learning tools, even though it is the obligation of a teacher to make their own learning tools or groups. After conducting interviews with teachers, it was found that the causes of teachers copying learning tools were that teachers did not want to bother, did not understand well in making learning tools, lacked facilities and infrastructure such as teacher handbooks on the subjects they were able to teach, learning tools were not asked to be shown or because they were not checked by the principal and supervisor.

The steps taken by the principal related to teacher learning tools are: (1) teachers do not understand well in making learning tools (Duruk et al., 2019); Teachers who do not know very well how to make learning tools are included if there is training, and must be conveyed or taught by the waka of the curriculum to teachers on how to make learning tools or the teacher concerned learns to those who are already able to make learning tools (Uwen et al., 2020). (2) facilities and infrastructure such as books; For the sake of the smooth process of teaching and learning activities, all training subjects must have a teacher's handbook, and books that do not yet exist will be supplemented by proposing to the National Education Office, Regional Government or the Centre. (3) teachers do not make learning tools because they are not asked to be shown by the principal or supervisor; so that teachers can make learning tools, the principal requires all teachers at the beginning of the new school year or the beginning of the semester in one month the teaching and learning process takes place all teachers have finished making learning tools, starting from the annual program, semester and lesson plans. Suppose there is a teacher who has not finished within the specified time limit. In that case, the teacher must

complete the learning tools at school (Zin et al., 2019), meaning that the teacher must work overtime and be supervised by the principal, provided with facilities such as computers to complete it at school.

A teacher must be competent and professional in carrying out the duties stated in the Law on Teachers and Lecturers 2005: "Teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing and evaluating students in early childhood education. formal channels, primary education, and secondary education". Based on this understanding, Teacher Competency Standards are a statement of the criteria required, determined, and mutually agreed upon in the form of mastery of knowledge, skills, and attitudes for an educational staff so that they deserve to be called competent. The competencies that must be possessed by teachers are (1) personal competence, including the ability to always present themselves as a person who is steady, stable, mature, wise, and authoritative, noble, professional, (Wibawani et al., 2019) (2) pedagogic competence, namely: Ability to manage students which includes an understanding of students, design, and implementation of learning, evaluation of learning outcomes (Achituv & Hertzog, 2020); (3) social competence is the ability of educators as part of the community to communicate effectively with parents of students, fellow educators, and the community as stakeholders of their expert services. (4) professional competence includes personality, the field of study, and education (teaching). Meanwhile, matters relating to educational (teaching) competence are the teacher's understanding of the characteristics of students and their development, understanding of educational concepts, teaching methodologies, and mastery of the evaluation system (Suparno, 2003: 47-53). The principal, as a manager, must play a managerial function by carrying out the planning, organizing, mobilizing, and coordinating processes. Planning is concerned with setting goals and strategies to achieve those goals.

Many Students Wander Around During Class Hours

Based on observations, almost every day, students hang around a lot outside the classroom during class hours; when interviews were conducted, it was found that the cause of students wandering around was due to lack of supervision; the teacher only gave notes so that students felt free to be unsupervised, the picket teacher was less active in controlling the situation at school, students are rarely reprimanded by the teacher if they ask permission to urinate. Hence, students hang out outside the classroom longer.

To prevent students from wandering outside the classroom during class hours, these are: (1) the teacher is required to be in class during class hours (Hallinger & Bridges, 2017), if there is a teacher who has a reason to want to do assignments in the office, the tasks to be done in the office are down to class (Harandi, 2015). (2) The picket teacher is obliged to control the school environment and give sanctions to students who are outside the classroom during class hours (Yengin et al., 2011). (3) the teacher in the class does not allow students to enter and leave the classroom.

Conclusion

Based on the results of the study, it can be concluded that: (1) the cause of teachers often giving notes to students is because the classroom atmosphere is dull, students act less respectfully of teachers, teachers are not supervised by the principal, teaching materials are lacking, and teachers who teach are not following the background. (2) the cause of the discrepancy between fellow teachers; lack of communication between teachers, rarely held family meetings, there is a sense of jealousy between fellow teachers. (3) readiness of learning tools by teachers; almost all teachers do not make learning tools such as human programs, semesters, and lesson plans. (4) the cause of students hanging around a lot outside the classroom during class hours; is lack of supervision, teachers only providing notes, and picket teachers being less active in controlling the situation at school.

Acknowledgements

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