

The Role of Principal's Leadership in Improving the Quality of Mathematics Education at Junior High School Kembang Tanjong

¹Hery Saputra, ²Cut Italina

^{1,2}Faculty of Education, Jabal Ghafur University, Jl. Gle Gapui, Peutoe, Sigli, Kabupaten Pidie, Aceh 24182, Indonesia

E-mail: ¹herysaputra346@gmail.com, ²iqbalunigha31@gmail.com

ARTICLE INFO

Article history:

Received: 13-07-2020

Revised: 13-09-2020

Accepted: 31-10-2020

Keywords:

Role;

Principal's Leadership;

Mathematics Education.

ABSTRACT

The success of an educational institution is highly dependent on the contribution and the role of a leader, who then commonly called the principal who should be able to bring its institutions towards achieving the goals set, able to see the changes and be able to see the future in globalization that is now significantly better life. The problem of this research is how the leadership's effect in improving the quality of mathematics education and how the principal's role in improving the quality of mathematics education at SMPN 1 Kembang Tanjong. The objective of this research is to measure and analyze the effect of principal's leadership in improving the quality of mathematics education and the role of principal's leadership in improving the quality of mathematics education. The method used in this research is qualitative descriptive method, in which the writer describes how the effects of principal in improving the quality of Islamic education at SMPN 1 Kembang Tanjong. The sample of this research is one principals, one vice principal, three teachers, two student, one society and one committee with technique of documentation, observation, and interviews with principals and teachers. The data analysis was done by means of: data reduction, data presentation, and conclusion. The results showed that the effect of school principals at SMPN 1 Kembang Tanjong towards improving the quality of education is guiding, developing, motivation and supervis.

Copyright © 2020 Journal of Management Science (JMAS).

All rights reserved.

1. Introduction

Leadership is at the core of management in educational institutions. This means that without good leadership, it is certain that the course of an educational institution will experience setbacks. One of the most serious challenges that must be faced by a leader is how he moves his personnel to be willing to give the best of his ability to benefit the educational group or organization. The ability and readiness possessed by a person to be able to influence, encourage, invite, demand, mobilize and if necessary force others to accept that influence, then do something that can help the observation of something with a purpose and purpose.

So, the success or failure of the process of recording the objectives of the educational institution which has been determined depends on the human element who leads and carries out the tasks and activities in the business concerned so that the success of the activities carried out is demanded. (Sulaiman et al., 2019) in their journals stated that "Competence is an important factor for individuals, because individuals who have competence will be able to display the quality and productivity of work in carrying out an activity. Competence shows behavior that enables them to carry out tasks in the most desirable way and not just carry out routine activities". Therefore, a principal must have four aspects of leadership dimensions, namely: Siddiq, Amanah, Tabligh, and Fathanah, which we can also analogize as; Siddiq is guided by conscience and truth (conscience centered), professional trust and commitment (highly committed), Tabligh communication skills, and Fathanah is able to solve problems (problem solver).

Based on the results of observations at SMPN 1, Kembang Tanjong District, there are still many inhibiting factors in improving the quality of education, this is indicated by the lack of discipline of students, inadequate school facilities, and the quality of education is relatively less guaranteed when compared to other formal schools, because of the many fields of study. teaching, while the quality of teachers is low, management is less professional, and educational facilities are mediocre, and the number of students is small, mostly from underprivileged families.

Is student success an achievement of teacher performance? Of course there needs to be research to prove this assumption. The success of school achievement is determined by various factors, including the leadership of the school principal. Principals at least have roles and functions as educators, managers, administrators, supervisors, leaders, innovators and motivators (EMASLIM) (E. Mulyasa, (2009).

These problems encourage the author to find out about several things related to the leadership of the principal in relation to mathematics learning in the school he leads. This research is very important to do in order to reveal how the principal's leadership contributed to the improvement of the quality of mathematics learning in Kembang Tanjong Junior High School.

2. Methodology

Based on the problems raised by the researcher, the type of research used in this study is a qualitative descriptive study, in which the authors describe how the role of the principal's leadership in improving the quality of learning mathematics education at SMPN 1 Kembang Tanjong. Qualitative research is research based on the post-positivism philosophy, used to examine natural objects, where the researcher is the key instrument, data collection techniques are triangulation (combined), data analysis is inductive / qualitative, and the results of qualitative research emphasize the meaning of on generalizations. Sugiyono, (2007). The reason for the research using this type of qualitative research is because the focus of the research to be carried out is direct interaction with the top leaders, namely the principal at SMPN 1 Kembang Tanjong.

There are many ways that can be done to determine the implementation of principal leadership, either directly or indirectly on the source of the data studied. Likewise, the data collection techniques used can be done with qualitative techniques in collecting data which are divided into four; 1) In-depth interviews with open question format, 2) direct observation and 3) use of written documents and triangulation (a combination of the three) Michael Quinn Patton, (1991). Each of these procedures can be explained as follows:

2.1. Observation

Systematic observation and recording techniques by going directly to the field by looking at the phenomena that are related to this research. Observation or observation techniques are human daily activities using the five senses of the eye and assisted by the other five senses. Burhan Bungin, (2001) Observation techniques are used to observe the implementation of the principal's role, the obstacles faced by the principal, directly observe the principal's activities carried out by SMPN 1 Kembang Tanjong, and the activities carried out by mathematics education teachers in the context of know the contribution of the principal's leadership in improving the quality of education at SMPN 1 Kembang Tanjong.

The observations made by the author are included in the type of participatory observation, in which the author is directly involved with the daily activities of the person being observed or who is used as a source of research data. While making observations, the authors participate in doing what the data sources are doing.

In this observation method, the writer not only observes the object of study but also notes the things that are contained in that object. In addition, the authors use this method to obtain data about the situation and conditions universally from the object of research, namely the portrait or the role of the principal's leadership in improving mathematics learning at SMPN 1 Kembang Tanjong, of course in addition to data about the geographical location / location of the school, the condition of the infrastructure. also the organizational structure. In this case, the observation focuses on the teaching and learning process of mathematics and the principal at SMPN 1 Kembang Tanjong.

2.2. Interview

The interview technique is a way to collect data by directing face to face between the person in charge of collecting data and the person who is the source of the data or the object of research (Ahmad Tanzeh, 2009). in interpreting situations and phenomena that occur. Interviews are also defined as a way to obtain data by holding direct questions and answers with the object of research or conversations between the interviewer (interviewer) with research subjects or the interview who provides answers to the interviewer's questions, with a specific purpose (Moleong, 2011).

The interview used in this study is an unstructured interview, meaning that the researcher only carries an interview guide that contains an outline of the things that will be asked of the subject. As the basic principle of interviewing qualitatively is to provide a framework so that respondents can understand and be able to express understanding in their own terms (Paton, 1991), therefore the interviewer must understand the best way to contact the interviewee, carefully use the tools, the main questions, have determined time and it has been determined exactly who, what and where the interview will be held (Moleong, 2011).

In this case the questions posed to the principal and mathematics teacher, hereby will reveal with some questions from less deep (pheriperal) to very deep questions (probing) in order to explore, clarify / seek critical awareness in seeking explanations aimed at attempts to focus on the role of the principal in improving the

quality of mathematics learning and the obstacles faced by the principal in improving the quality of mathematics learning at SMPN 1 Kembang Tanjong.

2.3. Documentation

Documentation according to Moleong, (2011) documentation is a written material or film that is different from the record, which was not prepared due to the request of the researcher, the document is, among others, almost the same as written data as data related to the data sources above, namely photos of activities, video of activities guidance at meetings, ceremonies, and meeting minutes, etc., and is divided into two, namely personal documents and official documents.

The document method referred to in this study is geographic location, number of teachers, number of students, meeting minutes, photos of activities, and principal data that are directly related to the research in this thesis. The research method is a general strategy adopted in collecting and analyzing the necessary data in order to answer the problems at hand. This is a plan for solving the problem under investigation. In the research method, there are several important things, namely the approach and type of research, the presence of the researcher, the research location, data sources, data collection procedures, data analysis, data validity checking, and research stages.

2.4. Triangulation (merging)

In data collection techniques, triangulation is a data collection technique that combines various data collection techniques and existing data sources. When the researcher collects data by triangulation, the researcher actually collects the data and simultaneously tests the credibility of the data, namely checking the credibility of the data with various data collection techniques and various data sources. Sugiyono, (2009) states that the value of data collection techniques with triangulation is to find out that the data obtained is widespread, inconsistent, or contradictory, by using triangulation techniques, the data obtained will be more consistent, complete and certain.

This research attempts to describe the collected data regarding the role of principal leadership in improving the quality of mathematics education at SMPN 1 Kembang Tanjong. Data and information are in the form of observations, interviews, and documentation, but qualitative analysis still uses words, which are usually arranged into expanded text. Huberman explained that qualitative analysis consists of three streams of activity that occur simultaneously, namely: data reduction, data presentation, drawing conclusions or verification (Milles Huberman, 1992).

2.5. Data Reduction

Data reduction is a form of analysis that sharpens, classifies, directs, removes unnecessary, and organizes data in such a way that final conclusions can be drawn and verified. In that way, we do not exclude existing data from the context in which it occurs or is obtained.

2.6. Data presentation / data display

The second important flow of analysis activity is the presentation of data. This activity limits a "presentation" as an organized collection of information that gives the possibility of drawing conclusions and taking action. By looking at the presentations, one can understand what is happening and what must be done, further analyze or take action based on the understanding obtained from these presentations.

2.7. Draw Conclusions / Verification

The third analysis step in the qualitative data analysis process is to draw conclusions or verification (Conclusion Drawing) of data based on findings and verify the data. The initial conclusions presented are still provisional and will change if strong evidence is found to support the next stage of data collection. This process of obtaining evidence is known as data verification. If the conclusions put forward at the initial stage are supported by strong evidence in the sense that they are consistent with the conditions found when the researcher returns to the field, then the conclusions obtained are credible conclusions.

3. Results and Discussion

3.1. The role of the principal as an educator

Principals who succeed when they understand the existence of the school as a complex and unique organization, and are able to carry out the role of the principal as someone who is given the responsibility to lead the school. Principal success studies show that the principal is someone who determines the center point and rhythm of a school. The leadership of the principal at SMPN 1 Kembang Tanjong in improving the quality of mathematics learning has a strategy or step that is carried out, namely through developing teacher quality by holding activities such as training and workshops. Special attention to student achievement through awards and others. The principal here always implements directions and appeals to students (students) to always follow the rules set by the school. Both those related to discipline, crafts and activities that have been held in schools such as remedial and extracurricular activities. In terms of extracurricular activities, core activities are

packaged through congregational prayer competition activities, Islamic art and various socio-religious activities that are carried out outside of class hours.

Likewise, when the deputy principal was asked the same thing, namely about this leadership role, he said: In improving the quality of learning, so far he has been the principal who is responsible for the development of educational institutions, so that the quality of education increases. In connection with the relationship between the head in improving the quality of learning, it is always necessary to implement quality learning so that the quality of education increases. So that with the responsibility the principal has, the implementation of learning can run properly.

As for the admission of Mr. AJ, he said that I applaud his leadership, because he has been proven to be able to improve children's achievement, at least in passing the final national exam and achieving 99% mathematics, as well as my child's math grade has reached math completeness of 80.

It will be clear that progress in the academic field, especially in obtaining average mathematics scores, can be seen from the following table:

Table 1.
Data Average Mathematics Score of Students of SMPN 1 Kembang Tanjong in 2018/2019

NO	CLASS		
	VII	VIII	IX
1.	66.5	7.2	7.8
2.	69.3	7.2	7.8
3.	7.5	7.0	69.8
4.	7.6	67.3	7.5
5.	7.9	7.5	7.8
6.	7.0	7.6	8.4
7.	7.3	8.1	

Source of data: Documentation of SMPN 1 Kembang Tanjong 2018/2019

3.2. Role of the Principal as Manager

The function of the principal in improving the quality of learning is to carry out a series of tasks in recording objectives. The principal must guide and supervise the activities of his subordinates, in this connection the principal also gives encouragement and enthusiasm to the teacher and the supervision under him so as to create steady work discipline in the implementation of learning.

The opinion that the researcher managed to find when asking about trainings to improve the quality of learning, the answer was: *"The training that is often followed in improving the quality of learning is K13 training, subject teacher training and so on. So that with this training and education and training, the implementation of learning can be mathematical and in the end the quality of education will increase as expected"*.

Based on the description above, it can be concluded that the form of training that is followed in improving the quality of learning is K13 training, subject teacher training and so on. So that with the training that is followed, the objectives and learning objectives will be mathematical as expected in the implementation of the teaching and learning process.

3.3. The role of the principal as a supervisor

The principal always strives to improve the quality of learning, so that with the efforts made, the learning objectives will be mathematical as expected. The efforts made by the principal in improving the quality of learning are providing guidance to teachers so that they can understand more clearly the problems or problems of student needs, and form teachers in anticipating a problem. In carrying out their duties as a supervisor, the work principle that must be considered is constructive and creative. This means that it is not just looking for fault, but must be followed by guidance and direction. Then the mistakes that are obtained must be reasonable, not made up by the principal, so that the teachers are safe in carrying out their duties. Particularly in terms of curriculum coaching and development, the principal's duty as a supervisor is very important, because this field is a very strategic factor to determine the success of the implementation of learning at SMPN 1 Kembang Tanjong, Pidie Regency. According to the results of the interview with Mrs. AK regarding the principal's efforts, as follows; Father often helps teachers in anticipating difficulties in teaching. Provide guidance to teachers with orientation. Fostering teachers enriches the teaching experience, so that the teaching and learning process is mathematical. Providing services to teachers so that they can use their abilities in carrying out assignments. In order to confirm the results of the interview above, the author deliberately asked students about how the teacher's ability to teach, students said that we were very happy with the methods used by our teachers in teaching, we really enjoyed the teaching and learning process so we didn't feel bored. Teachers here teach various methods, such as Jigsaw, CTL. etc.

3.4. The role of the principal as a leader

The key to successful leadership is essentially related to the level of concern of a leader involved with the components in the institution, these components such as teachers, staff, students, and components related to improving the quality of mathematics learning and the needs needed in schools. To be able to observe the objectives that have been set, as well as in order to motivate the people involved in these institutions, it is necessary to have a leadership.

This is in line with the results of interviews with the school committee which stated that:

The principal at SMPN 1 Kembang Tanjong builds a sense of togetherness and royalty among teachers, staff and employees, in order to achieve mathematics success in school together. The principal also builds a sense of kinship which aims to avoid feeling stiffness between superiors and subordinates, if the principal is able to mobilize, guide, and direct members appropriately, all activities in the school organization will be carried out effectively. On the other hand, if we cannot move the members effectively, it will not be able to optimally target mathematics.

The behavior of the principal must be the performance of the teachers by showing a friendly, close and full consideration of the teachers, both as individuals and as a group. This is in line with the results of an interview by one of the teachers in the field of mathematics study who stated that the leadership of the principal at SMPN 1 Kembang Tanjong has wise behavior, is wise and has a consistent sense of responsibility in leading this school, the principal is never closed but always behaves open, both with teachers and staff and employees.

Likewise, Ms. ZA's assessment is also possible, namely stating that the leadership of the school principal at SMPN 1 Kembang Tanjong is now very disciplined towards any activity in this school, and she does not prioritize her own interests but care for all school members. In line with the above statement, Mrs. AK also added that to achieve the success of the principal in leading an institution, a leader must have an honest attitude, prioritize group rather than personal interests, and have a high sense of responsibility. Likewise according to the assessment of the students, namely stating that he was fun, almost all students idolized him, smart, wise and full of charisma and not arrogant, full of responsibility and even very concerned about the interests of parents and students.

4. Conclusion

Based on the description of the principal's leadership above, the authors can conclude as follows:

- a. Educator
The headmaster gave directions and appeals to the students to always follow the rules set by the school. Whether related to discipline, crafts and activities that have been held in schools such as remedial and extracurricular activities as well as focus on teaching and learning activities in the school.
- b. Manager
Principals of schools provide opportunities for teachers to improve their professions such as participating in KTSP, K13 training, lesson teacher training and so on.
- c. Supervisor
The principal provides guidance to teachers so that they can understand more clearly the problems or problems of student needs, and form teachers in anticipating a problem.
- d. Leader
The principal builds a sense of solidarity and royalty among teachers, staff and employees, in order to monitor the success of the school together. The principal also builds a sense of kinship which aims to avoid feeling stiffness between superiors and subordinates.

5. References

- [1] Sulaiman, S., Fuad, F., Iqbal, M., & Muhammad, M. (2019). The Performance of Lecturer in the Development of Academic Culture in Ilmu Tarbiyah Al-Hilal College of Sigli. *Budapest International Research and Critics Institute (BIRCI-Journal) : Humanities and Social Sciences*, 2(4), 220–228. <https://doi.org/10.33258/birci.v2i4.613>
- [2] E. Mulyasa. (2009). *Menjadi Kepala Sekolah Profesional*. Bandung: PT Remaja Rosdakarya.
- [3] Sugiyono. (2009). *Metode penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R &D*, Bandung: Alfabeta.
- [4] Burhan Bungin. (2001). *Metodologi Penelitian Sosial*, Surabaya: Airlangga University Press.
- [5] Moleong. (2011). *Metodologi Penelitian Kualitatif (Edisi revisi)*. Bandung: PT Remaja Rosdakarya.
- [6] Patton. (1991). *Metode Evaluasi Kualitatif*. Yogyakarta: Pustaka Pelajar.
- [7] Purba, R. (2020). Understanding Deixis In The Song Lyrics Of Salam Alaikum. *L'Genus : The Journal Language Generations of Intellectual Society*, 9(2), 18-24. <https://doi.org/10.35335/lgenus.v9i2.7>

