

Research Article

The Role of School Principal as Motivator in Utilization of Digital Technology at SMAN 5 Takengon

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Abstract

This study attempts to describe the untold experience of digital technology utilization for learning at one of high schools located in the most central district in Aceh province. This study aimed to reveal the strategies and challenges implemented and experienced by the school principal and teachers at SMAN 5 Takengon, Central Aceh regency, Aceh province. This qualitative study involved three respondents namely a school principal, a regular teacher and a teaching staff. In collecting the data, the researcher employed an observation and interview session. The findings revealed that as a motivator, the principal at SMAN 5 Takengon implemented several strategies to positively encourage teachers to utilize the digital technology in the classroom through creating a positive working atmosphere, encouraging the teachers individually, providing the rewards, supporting the teachers with learning resources. However, the obstacles such as teachers' unproductive age and unfamiliarity, and consistent commitment became two most challenging factors in guaranteeing the utilization of digital technology for learning at SMAN 5 Takengon.

Keywords

School principal; motivator; digital technology

Introduction

In life, education plays a very important role because education is a vehicle for improving the quality of human resources. Education is a field that focuses activities on the teaching and learning process (knowledge transfer). In this process a psychological chain is needed to understand the condition of educators and students (Anwar, 2007). Education is an important part of human life because it differentiates humans from other creatures. So, education is a human effort to remind the knowledge obtained both from formal and non-formal institutions in assisting the transformation process so as to produce the desired quality (Anwar, 2014).



If there is an institution then there will be a leader where the success of an institution is seen from who leads it. Leaders are always the focus of all activities and movements in the progress of the organization. The leader is the main agent for determining the structure of the group or organization.

In school institutions, the principal is the holder of an important role in every activity in the school. Regarding who plays an important role in the school, Ngali Purwanto (2007) in his book stated that the principal is the highest position in the school so that the principal plays a role in everything related to school assignments both internally and externally. Therefore, in the organizational structure of the school, the principal is usually always seated at the top.

The principal as an influential leader in determining the progress of the school. Good school principals can make efforts to utilize existing technology through programs to develop the capacity of education staff and education staff in the use of digital technology. If you look closely, this shows that the duties and functions of the school principal are not insignificant because the principal is the most influential person in achieving an educational institution's goals. Humans living in today's mass are not only armed with the ability to read and write traditionally, but must be equipped with other skills and abilities, especially communication skills and technological skills.

Technology can increase quality and reach if it is used wisely for education and training which is very important for welfare. This shows that awareness of the development of science and technology is an effort to understand the conditions of the times. Technology is currently very important, skills in using digital technology help get information faster and improve life skills and educators can easily develop learning materials. Nevertheless, although the utilization of technology is highly encouraged in an academic setting, there are some obstacles that hinder this implementation such as inadequate facilities, lack of support and training provided by the learning institution (Panisoara, et al., 2020).

In this case the role of the school principal is needed to motivate education staff to utilize digital technology. For this reason, in supporting teacher activities, it is necessary to have a good and mutually supportive relationship between school principals, administrative staff, students and school employees as well as parents and the community.

In an effort to optimize the use of digital technology, motivation is one way that school principals can take in addition to other methods. Motivation is a process that gives enthusiasm, direction, and persistence of behavior. 4 Motivation is a driving force for someone in carrying out activities to achieve the expected goals, motivation is the main key to all success. Without motivation, a person will achieve little. Motivation is the engine, the pump room for everyone's desires, dreams and ambitions, motivation is the bridge between desire and action. A person will not be able to go far without motivation.

Method

This study attempts to describe the strategies and challenges implemented and experienced by the school principal and teachers at SMAN 5 Takengon towards the utilization of digital technology in learning. Therefore, the phenomena happened in a certain setting involving certain characteristics of the samples are described and revealed as qualitative research. According to Creswell (2009), qualitative study is designated to obtain the description and explanation of certain phenomena happened in a certain context which significantly emerge as something worthwhile to be seen and analyzed.

In collecting the data, the researcher conducted observation and interview. Observation was needed to obtain the general overview of school (SMAN 5 Takengon), whereas interview was directed to obtain



the answers and explanation from school principal, teacher and teaching staff related to the strategies and challenges in implementing the use of digital technology for learning in the classroom.

In qualitative research, data analysis is more focused on process during in the field and carry out the data collection at the same time. Technique of data analysis used in this study is qualitative data analysis, following the concept done by Miles and Huberman. Miles and Huberman (2007) propounded that the activities in qualitative data analysis are done interactively and continuously until it is complete, hence the data will be surfeited.

Results

The principal's strategy in motivating teachers to utilize digital technology at SMAN 5 Takengon Aceh Tengah

The principal's strategy in motivating teachers to utilize digital technology at the 5 Takengon Aceh Tengah public high school consists of a working atmosphere, encouragement, appreciation, and provision of learning resources.

a. Working atmosphere

The working atmosphere greatly affects the productivity and quality of the performance of educators. The better the environment, the educators will feel at home and productive work. Not only that, teachers are able to bring out their best potential not just for the sake of salary, but they do it for the long-term progress of the school. The working atmosphere is the biggest factor in determining the success of the principal's strategy. Because the better the working atmosphere, the more motivated the educators will be in carrying out their obligations such as utilizing digital technology, one of which is. To find out the working atmosphere at SMAN 5 Takengon the researchers asked several questions to the principal and teachers at SMAN 5 Takengon, Aceh Tengah.

The first question to the principal of SMAN 5 Takengon regarding the work atmosphere, the question is: *How do you create a work atmosphere so that teachers are motivated to use digital technology at SMAN 5 Takengon?*

The principal answered: *"The way to create a good working atmosphere with teachers is to maintain communication with teachers by maintaining communication, so we will know what are the difficulties and what teachers need to utilize digital technology in this school. Then to motivate us we can also provide examples for teachers to get used to using digital technology such as communicating and deliberating via zoom, using applications that facilitate learning."*

Teacher A replied that: *"The principal always communicates well with the teachers to make teachers use digital technology. The principal usually gives an example first for teachers where the principal always uses digital technology in all of his work activities so that teachers see and are accustomed to using technology. on the job. Then the principal always asks what is needed and what difficulties teachers face in using digital technology and other teaching materials."*

Teacher B replied that: *"The principal builds good communication with the teachers here, teaches by example and directs teachers who are more technologically savvy to guide teachers who still don't understand using digital technology, so teachers who don't understand technology are helped to understand." use of technology."*

The second question is still related to the working atmosphere so that teachers are motivated to utilize digital technology in public high school 5 Takengon Aceh Tengah. The question is: *How do you build good communication with educators so that educators are motivated to utilize digital technology?*

The principal replied: *"Building good communication with teachers is important, especially in providing encouragement and motivation. So, the way I build communication is by always providing constructive information for teachers regarding technological developments, always accepting the aspirations and suggestions of teachers so that when I give suggestions teachers can also receive them well, and involve teachers in making decisions and find solutions to all the difficulties teachers and schools face. Thus, the teacher will not hesitate to learn about technological advances and want to learn to use technology together."*

Teacher A answered that: *"The principal will usually ask about the difficulties faced by teachers in using digital technology, help and as much as possible provide learning resources for teachers learning digital technology. The principal also always provides information that teachers must know so that teachers here are not left behind by current technological developments."*

Teacher B answered that: *"The school principal builds communication by exchanging ideas and suggestions with teachers and providing the latest information about digital technology so that teachers in this school are not left behind with technological developments that make it easier for teachers to do all their work."*

Based on the results of observations made by researchers, the principal has tried to create a good working atmosphere in the school environment that makes educators comfortable with the work atmosphere and motivated to continue learning to use digital technology at school.

b. Encouragement

The encouragement from the principal to motivate teachers to take advantage of technology at SMAN 5 Takengon is very important, there will be questions including how the principal influences teachers, how does the principal help teachers and how does the principal set an example for teachers to be motivated to use digital technology in all school activities.

To find out the principal's strategy in encouraging teachers to utilize digital technology at SMAN 5 Takengon, the researcher asked several questions to the principal and teachers. The fourth question posed to the principal is: *How do you influence and encourage teachers to use digital technology at SMAN 5 Takengon?*

The principal answered: *"The way I influence and encourage teachers not to be technology stutterers is by providing information about technological advances and the ease of using technology to find and prepare lessons, providing assistance to teachers if they have difficulties in utilizing digital technology, providing examples of using technology. digital in all school-related activities and appreciate the efforts of learning teachers to take advantage of digital technology."*

Teacher A's answer was *"The principal usually gives advice and enthusiasm to teachers to continue to be enthusiastic about learning new things such as*

digital technology, provides examples of using and helps teachers to learn to use digital technology to make the teacher's work easier."

Teacher B's answer is *"To encourage teachers here the principal usually gives an example first where the principal gets used to doing everything using digital technology such as meetings, sharing information, and matters relating to school activities. The principal also helps teachers to want to continue learning using digital technology so that teachers are not left behind, and the principal also tries to always provide calm information on the use of digital technology which can make the work of educators easier.*

The fifth question is still related to the encouragement given by the principal so that educators are motivated to use digital technology at SMAN 5 Takengon. The question is: *How do you provide assistance to teachers who have problems using digital technology?*

The principal replied *"To provide assistance to teachers who have problems in utilizing this digital technology. Not only me, yes, but all of them contribute to helping educators who are still unable to utilize this digital technology. I only suggest teachers who are already proficient in digital technology to help teachers who still have difficulty using digital technology and provide learning resource facilities such as laptops and wi-fi that teachers can use at school."*

Teacher A answered that *"Assistance from the principal is usually in the form of facilities such as laptops and wi-fi as well as advice and enthusiasm so that teachers who do not understand digital technology are motivated to learn."*⁶⁵

Teacher B answered that *"The principal provides assistance in the form of enthusiastic advice as well as directions to teachers who are proficient in digital technology to help teachers who are still having difficulties. The principal also tries to provide the facilities needed in utilizing digital technology, even though sometimes the provision is not optimal."*

The sixth question is also related to the encouragement given by the principal so that teachers are motivated to use digital technology at SMAN 5 Takengon. The question is: *How do you give examples to make better use of technology at SMAN 5 Takengon in this digital era?*

The principal replied *"The examples I gave are only small examples for teachers to get used to using digital technology for each of their activities, such as using projector during meetings where everything that will be discussed at the meeting will be presented using power point, then ordering all teachers to fill out report cards automatically use computers besides because this is a necessity at this time but so that teachers also experience progress in the field of technology and can take advantage of digital technology provided in schools to facilitate the learning process."*

Teacher A answered: *"The example that the principal gives are usually the principal himself who familiarizes himself with all his work with technology such as meetings where the meeting discussion has been prepared using power*



point and does his work using digital technology. Even though sometimes we, who don't really understand technology, are a little confused."

Teacher B replied: *"Yes, the principal gave an example by the way the principal often uses the technology itself, such as meetings with power points that are displayed on the projector, and some time ago we were faced with a situation where we really had to go online, so there the principal directed the teacher to stay productive both meetings, the learning process is all done using the application. The principal continues to regularly hold meetings through the zoom and classroom applications."*

Based on the results of observations that the researchers obtained in the field, the principal at SMAN 5 Takengon has tried to encourage teachers to make more use of digital technology, although there are still some teachers who find it difficult to accept this technological advancement that everything is done using digital technology, the real purpose of which is make work easier.

c. Rewards

The seventh question that the researcher asked the principal was regarding rewards. The questions are as follows: *Do you appreciate educators who want to try to learn to use digital technology?*

The principal replied *"yes, there is definitely one although the appreciation might not be something big, because in my opinion all the efforts we do and have a good impact must be appreciated."*

The researcher asked the same question to the teachers at SMAN 5 Takengon, the question is: *Do you appreciate teaching staff who want to try to learn to use digital technology?*

Teacher A answered *"Yes, there is, the principal usually gives appreciation for the good things done by the teaching staff at school."*

Teacher B answered *"Yes, the principal will appreciate every effort the teachers make. The principal always sees the development of the teaching staff whether they are progressing or not when the teacher is progressing, the principal will appreciate that progress."*

The eighth question that the researcher asked the principal was still regarding rewards. The questions are as follows: *How do you appreciate the efforts of educators who want to learn to use digital technology at SMAN 5 Takengon?*

The principal answered *"The appreciation I give is not great, it's just giving praise, encouragement and thanks to teachers who want to try to learn to use technology. Maybe it's true that the appreciation that I give is not big but this is as a form of gratitude to the educators who have wanted to jointly advance this school so that this school, even though it is far from the city, is not left behind by technological advances."*

The researcher also asked the same question to teachers at SMAN 5 Takengon. The question is: *How do school principals appreciate the efforts of educators who want to learn to use digital technology at SMAN 5 Takengon?*



Teacher A answered that *"The appreciation given by the principal is like giving praise, thanking you, that's the only thing that should be done as a school principal or superior to his subordinates."*

Teacher B answered that *"The appreciation given by the principal is reasonable, yes, like congratulating, giving praise and thanks, but in my opinion, it is a quite valuable reward. Because that way the teaching staff will be more enthusiastic about learning digital technology because they feel that their efforts are appreciated even though what we learn is to facilitate our own activities as educators."*

From the observations that the researchers obtained in the field, the principal at SMAN 5 Takengon appreciated the efforts made by the teacher. The principal always appreciates every teaching staff who wants to try to learn to use technology even though the use of digital technology by educators is not perfect.

d. Provision of Learning Resources

Learning resources are one of the components in learning activities that enable individuals to gain knowledge of abilities, attitudes, beliefs, emotions, and feelings. In short, learning resources can be formulated as something that can be used to support and facilitate the learning process. The researcher asked several questions to the principal and teachers about the provision of learning resources at SMAN 5 Takengon.

The ninth question that the researcher asks is: *Are the learning resources of the teachers enough to learn to use technology in this school, sir?*

The principal answered *"I think it's quite different now from a few years ago which was still lacking, such as there was no wi-fi, the number of computers and laptops was inadequate. However, now there is a computer lab available here, there are also several laptops that teachers can use, wi-fi is also available, and there are also several computers in certain rooms such as the library, TU room and in the curriculum room. I think this facility is sufficient to become a learning resource for teachers to be more adept at using technology beyond other learning resources that teachers can look for themselves, such as books or journals that might add insight into technology."*

The researcher also asked the same question to teachers at SMAN 5 Takengon, while the question was: *Are the teachers' learning resources enough to learn to use technology in this school?*

Teacher A replied that *"For now I think it's enough, because the school's learning facilities have increased, making it easier for teachers who want to learn, it's just the willingness of the teachers to learn whether they want to learn to use it or not"*

Teacher B answered *"Compared to a few years ago, I think it is much better now, yes, everything is available at school. Such as computers, laptops, wi-fi and books. For the provision of learning resources so that teachers learn to use technology at SMAN 5 Takengon, I think it is sufficient."*

The tenth question that the researcher asked the principal and teachers was still related to the provision of learning resources. The question that the researcher will ask the school principal is: *Have the learning resources you have provided to study digital technology been properly utilized?*

The principal answered *"Yes, I think it has been put to good use even though there are still some teachers who are not proficient and do work that should be able to use technology but it is still done manually. I can see this in the library where there are already computers there but for circulation it is still manual using circulation books. Then when filling out report cards there are still teachers who are not proficient in filling out report cards with applications, then when zooming there are also teachers who are sometimes still confused about using the application. Apart from being not proficient, there are some teachers who are aged, making it a bit difficult to use technology. But as much as possible I still direct teachers to keep learning to use technology either by reading, or attending training"*.

The researcher asked the same question to teachers at SMAN 5 Takengon, while the question was: *Have the learning resources that the principal has provided to study digital technology been properly utilized?*

Teacher A answered that *"I think it's just that maybe it's not optimal because like me, who is old and almost retired, using technology is a bit difficult, even though I like it. Maybe because he is old, he is not as skilled as he used to be. There should be help from those who are younger and skilled in learning technology."*

Teacher B answered that *"In my opinion it has, even though there are some activities that are still being carried out manually but that has also begun a transitional period so that everyone takes advantage of technology to make it easier. The teachers also continue to try to improve their ability to be able to take advantage of existing technology by looking for learning resources such as reading books, asking other teachers who are more proficient, or take part in digital technology-based training."*

The next question that the researcher asked the school principal and teachers was also related to the provision of learning resources. The eleventh question that the researcher asked the school principal was: *Is there any counseling or training held for dacha teachers to be able to take advantage of today's digital technology?*

The school principal replied *"Yes, there is, the school has also held training at this school together with teachers from around this sub-district. In addition, there are also out-of-school trainings held in districts or other schools. The school will send a representative and the representative will teach the teachers who are here."*

The researcher also asked the same question to teachers at SMAN 5 Takengon, as for the question: *Is there any counseling or training for teachers in utilizing digital technology at this time?*

Teacher A answered *"Yes, of course there is, the school has held training on digital technology, because there are still many teachers who are not proficient in using digital technology. For now, digital technology is something that must*



be mastered by teachers because of the increasingly rapid advancement of technology, teachers in areas far from cities such as SMAN 5 Takengon cannot be left behind."

Teacher B answered "Yes, of course there is, apart from participating in training held outside the school, the school also conducts training. The training was held to train teachers to learn digital technology such as filling out report cards with applications, teaching in class rooms or meetings using the zoom application."

Based on the results of observations that the researchers obtained in the field, the school principal has provided sufficient learning resources so that teachers can learn to use digital technology at SMAN 5 Takengon. The use of the learning resources that the principal has provided is also quite good, the teachers have utilized the learning resources that the principal has provided to learn digital technology well, although it is not optimal for several reasons such as frequent power outages, and the teacher's age factor.

Discussion

Principal's Strategy in Motivating Teachers to Utilize Digital Technology at SMAN 5 Takengon

The results of the study show that the principal's strategy in motivating teachers to utilize digital technology is crucial, namely, the working atmosphere, encouragement, appreciation and provision of learning resources. Through these four things, it greatly influences teacher motivation in utilizing digital technology at SMAN 5 Takengon. An explanation of the results of research on the principal's strategy in motivating teachers to utilize digital technology is as follows:

a. Work Atmosphere

The working atmosphere at SMAN 5 Takengon is currently relatively good, the relationship between the principal and the teachers is quite good. The working atmosphere is the biggest factor in determining the success of the principal's strategy. Because the better the working atmosphere, the more motivated the educators are in carrying out their obligations, such as utilizing digital technology, one of them. A motivating and supporting institutional environment could be achieved by making time for teachers to engage in a more complex conversation in which they encounter the problems (Daniels, 2017). The principal and teachers at SMAN 5 Takengon have been able to create a comfortable working atmosphere at school so that teachers are more motivated to learn to use digital technology.

Based on the result of the interview, it was not just the effort from the principal to create a positive work atmosphere, but teachers should also could contribute with their own ways in shaping a supportive teaching environment. A study from Daniels (2017) towards teaching administrators related to this case also suggested that whenever teachers were able to create and had full control over how they design and run the class through technology-based instruction, not only teachers were motivated but also the students would be more academically successful. It was also suggested that in an uncontrolled context of teaching, teachers are suggested to find out and control the situation, especially in overcoming stress in term of ICT integration in teaching and learning process (Panisoara, et al., 2020).

b. Encouragement

The encouragement of the principal at SMAN 5 Takengon currently looks good and can motivate teachers where the principal has tried to encourage educators to make more use of digital technology,



the encouragement given by the principal is in the form of enthusiasm, assistance, exemplifying the use of digital technology and also receiving suggestions from teachers, as well as holding discussions to listen to the difficulties faced by teachers in utilizing digital technology so that solutions can be found together.

Regarding this, a study from Panisoara and friends (2020) highlighted the factors that impacted teachers' motivation internally and externally. Their study indicated that internal motivation was formed as the knowledge owned by the teachers towards technology integration and it could minimize teachers' negative perception of the difficulties in technology-based instruction in the classroom. Meanwhile, external motivation tends to be more pressing factors of the fear of losing job, the dependent towards salary to ensure the basic income and stigmatization that teachers were negatively labelled at school. As the response to this issue, as a leader, the leadership of a school principal could potentially motivate teachers' performance especially in performing the use of technology in the classroom by providing workshop, seminar and training, so that the teachers' quality could be upgraded and guaranteed (Jannah, 2020).

Although there are still some teachers who find it difficult to accept technological advances due to age, so their motivation to learn digital technology is not too great and the principal also does not force them but still helps as much as he can.

c. Rewards

Rewards are one of the principal's strategies to motivate teachers to be more enthusiastic about using digital technology. This reward strategy has been carried out by the principal at SMAN 5 Takengon for teachers as a form of appreciation for the principal's efforts to learn to use digital technology. A recent study from Comighud and Arevalo (2021) agreed that proper incentives and bonuses could become motivational for teachers at school in order to attend to their growth needs in the form of positive and supportive work engagement. The rewards that the principal does are not big things but can build motivation such as congratulation, thanks and enthusiasm, but it is these remarks that make teachers feel their efforts are appreciated and are motivated to continue developing in using technology.

d. Provision of Learning Resources

Provision of learning resources for teachers learning to use digital technology at SMAN 5 Takengon has been fulfilled and can be said to be sufficient, in providing learning resources the principal has provided adequate learning resources such as computer labs, laptops that teachers can use, books on using technology and even wi-fi. Learning infrastructures both mobile and non-movable are essential equipment should be fulfilled to achieve learning goals which allow students make inquiry and discovery over understanding and problems of certain knowledge being studied (Kristiawan & Muhaimin, 2017; Agustini, Lian & Sari, 2020).

Barriers to the Principal's Strategy in Motivating Teachers to Utilize Digital Technology at SMAN 5 Takengon

The results of the study show that the obstacles faced by school principals in motivating teachers to utilize digital technology at SMAN 5 Takengon are still having difficulty motivating some teachers to accept technological advances that continue to develop due to the age factor where there are some teachers who are indeed old and almost retired so that the principal does not too pressing to use digital technology even though the principal still tries to assist. Sometimes the motivational factors might not really influence the performance of teachers in terms of level of ages. Some experienced teachers who are older tend to ignore the motivation given by their leaders and pretend that they could do the instruction well (Sala, 2017).



Panisoara, et al. (2020) at least revealed several factors associated to the motivation of teachers in performing effective digital technology in the classroom and two of most influencing factors were burnout and technostress. According to Jena (2015), technostress is an issue faced by people of faulty adaptation towards the changes and requirement of technological aspect that leads to the psychological and physical stress afterwards. These burnout and technostress experienced by the teachers happened because they might fail in perceiving themselves as competent teachers who could actually teach using technology (Panisoara, et al., 2020).

Then in the use of digital technology where the role of electric current and internet network is very much needed, however, for the area of SMAN 5 Takengon, there are still very frequent power outages and the internet network is not stable, which hinders the use of digital technology in schools. The lack of competence and access to resources are the major barriers for technology integration at schools namely ICT resources, effective professional development, adequate time and technical support because no one competent in itself is sufficient to produce reliably good teaching (Bingimlas, 2009). Similarly, a study from Jordan, Sañosa and Caotivo (2021) proposed a framework of successful ICT integration in teaching, namely basic knowledge and skills, technical knowledge and skills, hardware and software availability and knowledge and skills application.

Then with regard to digital technology where schools are required to use digital technology in learning because it has become an obligation of the 2013 curriculum, for now SMAN 5 Takengon does not yet have an ICT subject teacher so automatically the informatics subject cannot be implemented in the academic year 2021/2022. However, the school has proposed it to related parties / Provincial education office.

Conclusion

From the results of research conducted by researchers regarding the role of school principals as motivators in the use of digital technology, several conclusions can be drawn as follows: First, the principal's strategy in motivating teachers to utilize digital technology at SMAN 5 Takengon Aceh Tengah:

Working atmosphere, the principal at SMAN 5 Takengon has made an effort creating a good working atmosphere in the school environment that makes educators comfortable with the working atmosphere and motivated to continue learning to utilize digital technology in schools.

Encouragement, the principal at SMAN 5 Takengon has tried to encourage educators to make more use of digital technology, although there are still some teachers who find it difficult to accept this technological advancement that everything is done using digital technology whose true purpose is to make work easier.

Rewards, the Principal of SMAN 5 Takengon appreciates the loyal efforts of the teacher. The principal always appreciates every teaching staff who wants to try to learn to use technology even though the use of digital technology by educators is not perfect. This has a great impact on the motivation of teachers to learn to use digital technology to make it easier and to be able to keep abreast of current digital technology developments.

Provision of learning resources, the Principal of SMAN 5 Takengon has provided sufficient learning resources so that teachers can learn to use digital technology at State High School 5 Takengon. The use of the learning resources that the principal has provided is also quite good, the teachers have utilized the learning resources that the principal has provided to learn digital technology well, although it is not optimal for several reasons such as the age factor, there are teachers who still have difficulty using digital technology, frequent blackouts electricity and unstable internet network.



Secondly, challenges to the Principal's Strategy in Motivating Teachers to Utilize Digital Technology at SMAN 5 Takengon suggested that the school principal in motivating teachers to utilize digital technology at SMAN 5 Takengon is that there is still difficulty motivating some teachers to accept technological advances that continue to develop because of the age factor where there are some teachers who are old and almost retired so the principal does not put too much pressure on using digital technology although the principal still tries to assist.

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