# Role of Teachers in Implementation 21<sup>st</sup> Century Education at Basic School Number 060825 Medan Area North Sumatra

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Abstract. This study contains research on the role of teachers in 21st century primary school education. This study aims to describe the role of teachers in the 21st century in State Elementary School 060825 Medan Area, Medan. The method used in this research is descriptive qualitative. Analysis that describes the situation in the field and the facts, the process of systematically searching and compiling data obtained from interviews, field notes and documentation, by organizing data into categories, describing it into units, choosing which is important and what will be learned, and make conclusions so that they are easily understood by themselves and others. The subjects of this study were the fifth grade teacher and the principal of SD Negeri 060825 Medan Area, Medan. From the results of research by interviewing classroom teachers and principals, it can be concluded that in facing 21st century education, a teacher must have characteristics in teaching, namely: teachers are able to adapt to the situation, able to communicate, teach, lead, have a vision, be a good model, collaborate with students, and dare to take risks. If all the criteria are owned by each teacher, they will be ready to face 21st century education.

Keywords: implementation, century, education, organizing

## 1. Introduction

The 21st century is a century based on the Gregorian calendar and started from 2001 to 2100. In this century, technology developed enormously [1]. This rapid technological development has an impact on various fields, namely economic, social, political and cultural and make a linkage of a country with another country which is also called globalization.

In addition, various kinds of technological discoveries and sophistication sprang from small things to large ones. Phones that used to use coin phones, now there are no more. Today's telephone communication devices have metamorphosed into mobile phones, gadgets, and tablets that come with a variety of brands with each of the advantages offered. Besides that, significant developments can also be seen from typewriters who used to use typewriters to turn into computers and laptops that are used not only for typing but also various other functions such as searching for information and images. Especially with the internet that can be accessed via mobile phones or computers. Anyone can search for any information anywhere and anytime without space and time limits. All these technological advances provide convenience and speed and accuracy of access for its users.

This progress has positive and negative impacts. Everything depends on the user. If the user uses it for a good thing, then it is good also the consequences and also the contempt. Therefore, the control of the user is very important. The teacher is the key actor in the

learning. In this case the teacher has a very vital and fundamental role in guiding, directing, and educating students in the learning process. Teachers play a very important role because no matter how good the curriculum and education system are, without the support of the quality of qualified teachers, everything will be in vain. Conversely, with qualified teachers the curriculum and system that is not good will be supported. The existence of teachers is even irreplaceable by anyone or anyone even with sophisticated technology. Educational tools and media, infrastructure, multimedia and technology are only media or tools that are only used as teachers and companions.

The teacher is one of the key factors that determine the direction of the quality of education [2]. Even though current educational theories emphasize student-centered learning, the teacher's role cannot be eliminated. Moreover, teachers are not merely teachers. He is also an educator. As a teacher, the teacher does not only play a role in delivering knowledge but is also obliged to conduct evaluations, manage classes, develop learning tools etc.

Important skills mastered by future teachers in dealing with 21st century education are digital age literacy, inventive thinking, effective communication, and high productivity. Intelligent teachers will be able to think critically in solving problems and be creative and innovative at work. If the competency is accompanied by the ability to communicate effectively and be able to work together with others, then any of the toughest challenges can be passed by the teacher.

The purpose of this research to describe the role of the teacher in the 21st century at SD N 060825 Medan Area. Meanwhile the benefits to provide insight into the role of teachers in the 21st century, in order to be able to prepare teachers for 21st century education. And to be able to advance education in Indonesia in the future.

As an effective and superior professional teacher, many theories have been presented by education experts. Among other things, [1] saw three main functions of teachers in learning, namely planning (planner) implementation and manager (organizer) and evaluator (evaluator). Education as a media and vehicle for the transfer of value systems believes that there are five roles and functions of teachers, namely as a conservator (maintainer) of the value system which is a source of maturity norms, innovators (development) of the value system of knowledge, as a transmitter (successor) value system through personal and behavioral incarnation. Through the process of interaction with students, and organizers (organizers) the creation of an educational process that can be accounted for in the process of transforming the value system.

Meanwhile, [3] revealed that there are six roles and functions of the teacher consisting of: a. Scene designer (assuming a scene) assuming learning is a theater with the teacher as the director, a builder builds the skills and skills of the students as a whole, a learner (learning) has been revealed before that while teaching the teacher teaches, so students are a co-learner, then also as an emancipator (teacher and emancipation implementer) the teacher must fairly give all students the opportunity to develop their potential regardless of gender, race, nationality, ethnicity, religion, and socioeconomic position, a conserver, preserver) through learning the teacher preserves the noble values of the nation, as well as a culminate (the winner of the peak point) the teacher designs learning from the beginning to the end (culmination) from simple to complex, then together with students the peak point in the form of successful pursuit.

The 21st century is a century marked by the rapid flow of information and communication technology. According to [4] there are four learning characters in the 21st century or known as 4Cs, namely communication, collaboration, critical thinking, and creative-innovative. The communication in question is that students in this century are given ample opportunity to be

able to communicate both verbally and in writing. This is much different in the previous century where the system refers more to the teacher (teacher-centered). Furthermore, students are also required to be able to work together in learning, so that learning becomes a leader or person who is led and can adapt and appreciate the cooperation. Coupled with the third characteristic of having high critical power so that later able to provide a variety of solutions for various problems that arise.

In a website managed by Churches, it is stated that the teacher's role description includes eight things [5], illustrated in the following figure.

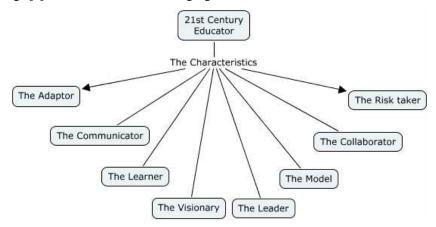


Figure 1. Teacher 21st century Characteristic

Another matter with [6] outlining in the teacher's role into seven aspects; (1) creative people, (2) good speakers, (3) innovators, (4) planners, (5) technology users, (6) agents of social change, (7) good coordinators. Teacher challenges in the digital age; teachers still use a lot of 80's products, while students use contemporary products. As a result, students differ radically from teachers, because there are many disconnections here and there. We know that students now no longer fit the 20th century education system. However, praxis in the field, teachers still do not understand this. Many of our teachers are very slow to pursue the pace of education modernization. What happens then is students are able to receive information quickly from various multimedia sources, while many teachers often provide information slowly and from limited sources. Students like to see pictures, listen to music and see videos first before seeing the text, while the teacher gives the text first. Students like to do together activities at the same time, such as completing assignments while listening to music from a laptop, while teachers tend to want to do only one thing at a time. Students want to access multimedia information hyperlink randomly, while teachers prefer to provide information in a linear, logical and straightforward manner. Students like simultaneous interaction with many people, while teachers want their students to work independently. Students like lessons that are relevant, interesting and can be used immediately (instant), the teacher wants to follow the curriculum and meet standardization [7].

This phenomenon seems to be a bitter pill that we must swallow together. Stretching the virtual world today is more loved by our students, making teachers have to think again to arrange a teaching system that is relevant, innovative and adaptive. We look at the community or school, students now in addition to following the material face to face to teachers at school, they also have extraordinary teachers who are extremely effective in virtual space, namely

"Google". This Google search engine able to facilitate the search for knowledge very quickly and practically.

This phenomenon certainly gives an understanding that the existence of teachers from one side will experience a threat, because teachers will lose their jobs and are abandoned by their students [6]. But on the other hand, teachers actually get a lot of opportunities if they are able to improve their professionalism and capabilities. In other words, if teachers cannot fully enter the digital age, they can become a bridge of revolution. Namely, by making themselves as motivators, who move students to learning resources that can be accessed. As a dynamicator, who can monitor students in order to develop their creativity and imagination. As an evaluator and justifier, who can assess and give notes, additions, treasury, and so on the findings of students.

## 2. Research Method

This type of research is descriptive qualitative. Qualitative research methods are methods for investigating objects that cannot be measured with exact numbers or other measurements. Qualitative research can also be interpreted as research that is descriptive and tends to use analytics with inductive approaches. Observation site was held at SD N 060825 Medan Area. In order for this observation to be in line with what is expected the writer limits the scope of the observation, that is only the fifth grade teacher and the principal. The method used in this research is descriptive method. Descriptive methods are not only limited to data collection, but include analysis and interpretation of the meaning of the data. The interview method we use to find out through characteristics of school teachers and how to learn and learn at school.

#### 3. Results and Discussion

The first observed at SDN 060825 Medan Area to conduct an interview with the Principal. Based on the results of interviews and information obtained from the principal of this school, has 17 teachers and 4 employees along with administrative staff, which adds up to 21 people. The age of teachers who teach in schools is under 40 years so it can be ascertained that all teachers are able to use and operate computers and other information technology. This school has 3 laptops, far from enough, and also has no projector at all. Then this school does not provide internet network so if you want to access the internet you have to connect directly from each teacher's hand phone.

In this school learning system there are implementing e-learning learning in some lessons, although not all of them. Because the school has an Islamic background, the learning that is carried out is dominant regarding religious values such as the example of performing the Duha prayer according to the applicable schedule, requiring both students and teachers to memorize Qur'anic verses and other religious values. Nevertheless, learning in this school still uses the 2013 curriculum [8]. The school regulations that do not allow students to bring mobile phones to school, if there is a need for schools to provide telephone that can be used. Actually, teachers are also not allowed to bring mobile phones to class, but if the situation is urgent and is used as a means of learning and learning information, then it is okay for teachers to carry mobile phones. Further discussion will be described in the following section

a. Interview with grade V teacher about the characteristics of SD N 060825 Medan Area teachers who are able to adapt to the environment (The Adapter).
When I was observing in the field the headmaster immediately directed me to interview the fifth grade teacher, Mrs. Hi. To her I asked how to adapt in class. As a class teacher,

she replied that the lack of adequate facilities and infrastructure at school did not become an obstacle to the development of teaching and learning in the classroom. In addition to the lecture method he sometimes uses power points and learning videos, although the school does not provide facilities such as laptops and projectors, but he can overcome these limitations by using personal laptops to support learning. Because by using a variety of learning media can attract student learning interest, arouse curiosity of students, and does not cause boredom in learning.

- b. Interviews about the characteristics of teachers in SD N 060825 Medan Area in communicating and communicating learning (The Communicator). In establishing good communication in the learning process or not the teacher has an important role. From the results of the interview with the class teacher, he explained that in delivering the material he had to use language that was easily understood and understood in accordance with the discussion of learning, the level and situation and conditions of the class. If the atmosphere is noisy and learning is carried out above 12 noon it uses slow techniques and conveys learning with fun such as questions and answers or filled with games but still in the context of learning. As a class teacher must understand the characteristics of each student, if found problems are not reluctant he asks directly and is ready to be a friend to share and find solutions so that students do not have inhibiting factors in learning. teachers are required to have good communication so that he is able to transfer knowledge to the students so that students understand what he is saying and mean by the teacher.
- c. Interview about the characteristics of teachers in SD N 060825 Medan Area in teaching (The Learner).

The results of an interview with his class teacher explained that in teaching grade V students, it was difficult and difficult, sometimes the class was noisy and difficult to arrange. In overcoming these problems, she gave several rules and sanctions if students violated them. For example, noisily disturbing the sanctioned friend adds to the child's memorization, giving mild physical punishment such as squat jump and frog jumping. The penalty also applies to children who do not do the work. Then during the Mrs. H prayer, the kid will play with ten times the number of rajahs' in order to give the child a deterrent effect. By giving a sentence like that it also provides benefits for these students for example children have more memorization of the Koran.

d. Interview about the characteristics of teachers in SD N 060825 Medan Area in their vision (The Visionary.)

In accordance with the vision of the school to be a superior primary education institution through a combination of general education and religion as one of our class teachers, we must carry out this vision in order to achieve school goals. The author [9] said that running general education must be balanced with religious education. With the development of increasingly sophisticated times we must be selective in choosing to accept foreign cultures. With the demands of our times we must be able to foster a balanced intellectual intelligence, emotional intelligence, social intelligence, spiritual intelligence. In order to keep up with the flow of the times students do not forget their true identity by instilling a sense of love, gratitude, students to the creator.

e. Interview about the characteristics of SD N 060825 Medan Area teacher in leadership spirit (The Leader). According to Mrs. H as a teacher must show empathy to students so students will also learn from us. Good leaders are those who are able to empathize and feel what is felt by their subordinates, this will be able to get closer to others. As teachers we must take responsibility for what we do. That way we teach the importance of responsibility to grow a sense of responsibility to students. In addition to a sense of responsibility the teacher must teach caring for others and accustom students to make targets and realize them

f. Interview about the characteristics of teachers at SD N 060825 Medan Area in becoming a Model in learning (The Actor).

A teacher must be a good example in order to be an appropriate role model for students. Mrs. H explained that a teacher indirectly gave an example of teaching responsibility, discipline, good behavior, polite speech, respect for elders, throwing trash in its place. That's all I do because if not then my students will lose a good role model for them, especially in the formation of their characters who are still looking for identity. If you copy the wrong example from the beginning, then the results in the future will not be good too. The teacher must show attitudes that inspire students to do the same thing, or even better.

- g. Interview about the characteristics of teachers at SD N 060825 Medan Area in building collaborations with students (The Collaborator). In addition to having to establish good communication, forming a friendly collaboration between teacher and student is needed to achieve the desired goals together. For example, the father did in arranging the classroom and guarding the classroom. If the teacher and student cannot establish good cooperation, they will not be able to work on the performance of the class device in achieving their shared desires.
- h. Interview about the characteristics of teachers in SD N 060825 Medan Area in being brave in taking risks (The Risk taker). As a class teacher must dare to take risks from the actions taken. From the interview results the teacher is the parent of the school besides teaching the teacher must be able to form the character of the students, especially with there is a full day program at the moment. While parents are busy looking for money for their children's future. Manyadari many times with the teacher so with his authority the teacher should instill positive character to students in the form of developing good values, sharpening sensitivity to the circumstances, also the character of motivation so that children have noble character. During the learning process does not always run smoothly, there are parents who do not accept if their children are punished. The old man came to school to question if there was found physical violence. Therefore, teachers must be able to control themselves so as not to engage in physical violence. Teachers in making class policies must also 0}be communicated to students' parents to avoid communication [10]. From all that the teacher must have the courage to take risks this is a direct learning of students to see the teacher doing new things and how to overcome the risk of failure.

### 4. Conclusion

From interviews with class teachers and principals in 21st century education, at least 3 (three) lessons should be conducted, namely: (a) learning that focuses on the construction of search and discovery, (b) learning that emphasizes creativity and initiative, and (c) learning that emphasizes interaction and collaboration. The role of teachers in learning in the digital era there are seven namely: (a) the teacher as a source of learning; the teacher's role as a learning resource is related to the teacher's ability to master the subject matter. (b) the teacher as a facilitator; the role of the teacher as a facilitator in providing services to students to be able to facilitate students to receive subject matter. (c) the teacher as manager; in the learning process,

the teacher has the role to take full control of the climate in the learning atmosphere; (d) the teacher as a demonstrator; acting as a demonstrator means that here is not going to the streets to demonstrate. The teacher is as a person whose role is to show attitudes that will inspire students to do the same, even better; (e) the teacher as a guide; his role as a mentor, the teacher is asked to be able to direct students to be what they want; (f) the teacher as a motivator; the learning process will succeed if students have motivation in themselves; (g) the teacher as an elevator; the teacher must evaluate all the results that have been done during the learning process.

#### Suggestion

The suggestions that can be conveyed in connection with the results of this study are for interested readers and teachers should always improve their character in facing the 21st century every teacher should have eight characters, namely: teachers are able to adapt to the environment and school conditions, able to communicate well, able to teach with breed, have a vision for the future or targets to be achieved, have a leadership spirit, be a good model for students, able to work with students, and dare to take risks. If all the criteria are owned by each teacher they will be ready to face 21st century education, and advance education in the future.

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