

## **Portrait of Teachers Information and Communication Technology Master at SD Negeri 11 Indralaya, Ogan Ilir Regency**

**Idayana<sup>1</sup>, Edi Harapan<sup>2</sup>, Andi Rahman<sup>2</sup>**

<sup>1</sup>SMA Negeri 1 Kayuagung, South Sumatra, Indonesia, <sup>2</sup>Universitas PGRI  
Palembang, South Sumatra, Indonesia

Corresponding author e-mail: [idayana675@gmail.com](mailto:idayana675@gmail.com)

**Abstract:** This research is qualitative research conducted to describe the condition of teachers' mastery of Information and Communication Technology (ICT) at SDN 11 Indralaya. The purpose of this study was to find out how much mastery teachers have in understanding and using Information and Communication Technology (ICT) at SD Negeri 11 Indralaya. The population in this study were teachers at SD Negeri 11 Indralaya, totaling 26 teachers and 5 staff of education staff. The results of this study revealed that of the 26 teachers on duty, 7 teachers were categorized as proficient in mastering ICT Technology, as many as 10 teachers were categorized as moderate in mastering ICT, and as many as 9 teachers were categorized as less proficient in mastering ICT Technology.

**Keywords:** Communication Technology, ICT Technology, Teacher's Information

### **A. Introduction**

The teacher is a noble and honorable profession, this is because a teacher's job is as a guide and educator, especially elementary school teachers who have great responsibility in the development and growth of children so that they become children who grow to the adult stage so that they can achieve a better life at home in the future (Siagian, 2016). The field of education continues to evolve alongside technological advancements, and the integration of Information and Communication Technology (ICT) has become a crucial factor in enhancing the quality of learning. In this context, the Portrait of Teachers Information and Communication Technology (ICT) Master approach provides a relevant framework for understanding and assessing teachers' proficiency in utilizing ICT. Several experts have shared their valuable perspectives on the significance of developing ICT competencies among educators. Within this discourse, experts have articulated various viewpoints. Mishra (2002) emphasizes that ICT mastery extends beyond mere comprehension of hardware and software, encompassing creativity, design thinking, and the ability to effectively integrate technology into the curriculum (Susanto, 2016).

Similarly, Jung (2014) asserts that teachers with strong ICT competencies can transform traditional teaching methods into collaborative, creative, and problem-

oriented learning experiences. Dr. Elizabeth Koh (2011) highlights the importance of the Portrait of Teachers ICT Master as a valuable tool for comprehending teachers' strengths and weaknesses in incorporating ICT into their instructional practices. Ferdig (2013) further affirms that the development of ICT competencies among teachers not only enhances the quality of education but also contributes to their professional growth. Teachers play an important role in carrying out the teaching and learning process, therefore the success of education is greatly influenced by the high role of a teacher. Because the teacher's duties and responsibilities are very important, a teacher is required to have professional competence in his field, the teacher must master a very broad learning material.

In my opinion, a professional teacher is a teacher who must have a scientific mindset, master learning concepts, master the material to be taught, be able to use good information and communication technology, be able to keep up with the times, be able to adapt in the digital era as it is today. Dr. Denise A. Schmidt-Crawford (2015) underscores the significance of the Portrait of Teachers ICT Master approach in identifying and addressing gaps in teachers' ICT competencies. Additionally, Dr. David M. Kennedy (2017) argues that teachers who possess ICT proficiency can create relevant and challenging learning experiences for their students. Dede (2005) emphasizes that ICT competencies empower teachers to expand students' access to pertinent digital learning resources, fostering engagement in collaborative and self-directed learning. Similarly, Voogt (2010) suggests that teachers' utilization of ICT can stimulate the development of higher-order thinking skills, including critical thinking, creativity, and problem-solving.

Ertmer (2012) highlights the significance of cultivating ICT competencies among teachers to establish a learning environment that enables students to interact productively and critically with technology. Likewise, Giannakos (2019) posits that teachers' utilization of ICT can enrich students' learning experiences through interactive tools and resources, such as simulations, educational games, and virtual environments. Consequently, by employing the Portrait of Teachers ICT Master approach, we can gain comprehensive insights into the pivotal role of nurturing ICT competencies among teachers for the seamless integration of technology into educational practices. This not only influences the quality of learning but also contributes to teachers' professional development and prepares students for a digitally interconnected world. However, not all teachers can carry out their duties to the fullest, in fact many teachers cannot adapt to increasingly sophisticated developments, where I teach for example, there are 14 teaching staff including education staff, consisting of 10 grade 1 teachers PAI teacher, 1 PJOK teacher, 1 school guard and also 1 school principal. Of the 14-teaching staff, only a portion can operate information and communication technology. In this digital era, teachers will find it difficult to carry out teaching and learning activities if the teacher is unable to use

technology. One of the factors that influence the realization of teaching effectiveness and efficiency is a teacher's ability to use technology. With Information and Communication Technology (ICT) a teacher can transfer material, assignments, student exam results, so knowing student test scores can be even more active in improving their exam results.

## **B. Methods**

In this study researcher used a qualitative method, which is research that uses analysis and is descriptive in nature in the form of a complete description of the problem under study, which cannot be obtained through statistical processes or calculations. The subjects of this study were the teachers and staff of SDN 11 Indralaya, which consisted of the principal with 26 teachers, namely 24 PNS teachers, 3 Voluntary Labor (TKS) teachers and 1 TU, 1 operator, one librarian, one security guard, and one cleaner. While the object of this research is the mastery of ICT for teachers in the SDN 11 Indralaya environment, Indralaya sub-district, Ogan Ilir Regency in particular, and teachers in Indralaya sub-district in general. The data used in this study uses two types of data sources, namely primary data and secondary data. Primary data is a data source that directly provides data to researchers or data collectors (Sugiyono, 2017). While secondary data are data sources that do not directly provide data to data collectors, for example obtaining data from other people or through documents. (Sugiyono, 2017).

In this study, the primary data sources were the results of direct interviews and interviews via Whatsapp and Google form. Meanwhile data secondary is the results of observations of researchers such as words, actions, attitudes that are usually carried out by the object under study which are related to the research topic regarding teacher mastery studied on Information and communication technology (ICT) which is used by teachers both in the learning process and in managing participant data educate. Data collection techniques in this study were carried out through observation (observation), interviews (interviews), and documentation. In data collection techniques through observation, researchers enter themselves into the world where respondents are, by following the flow of respondents and continuing to observe participants and recording information related to research. One technique that can be used to find out or investigate non-verbal behavior is to use observation techniques (Sugiyono, 2017). Meanwhile, in the technique of collecting data through interviews, the researchers used guided free interviews. This interview aims to obtain information related to research. For the documentation technique seen in the form of documents owned by the school principal, such as teacher personal data, trainings that have been attended by teachers, or those that have not been attended, related to the use of ICT, the last education of the teacher, the age of the teacher, because the use of ICT is closely related to the age factor, for example teachers who are 50 years and over will

experience many problems in accessing ICT, while teachers who are under 50 years old and so on and below will really be able to master ICT along with their development.

The results of observational research and interviews will be more reliable if they are supported by a document. while teachers who are under 50 years old and so on and below will really be able to master ICT along with its development. The results of observational research and interviews will be more reliable if they are supported by a document. while teachers who are under 50 years old and so on and below will really be able to master ICT along with its development. The results of observational research and interviews will be more reliable if they are supported by a document. The data analysis technique used by researchers in this study uses the Miles and Huberman model. Data analysis in qualitative research is carried out when data collection takes place and after completing data collection within a certain period of time. Activities in analyzing qualitative data are carried out interactively and run continuously until complete (Sugiyono, 2018).

### **C. Results and Discussion**

Based on research conducted by researchers on teachers at SD Negeri 11 Indralaya, Indralaya District, Ogan Ilir Regency, there are obstacles and obstacles faced by teachers so that they are not optimal in mastering ICT in teaching and learning activities at SD Negeri 11. Based on interviews with the five subjects studied, it was found that out of 26 teachers there were 5 PNS teachers and 3 TKS teachers at SD Negeri 11 who could be categorized as very good at using Information and Communication Technology (ICT) both in learning and in inputting data and students' grades. According to HS, the five PNS teachers and 3 TKS teachers are accustomed to using ICT to support teaching and learning activities, such as laptops, In-focus, and Android cell-phones. And as many as 12 teachers are categorized as having moderate ability in mastering ICT and the remaining 6 teachers are categorized as less capable in mastering ICT in teaching and learning activities.

The following are the results of interviews that researchers conducted:

1. Teacher Sumarni said that Information and Communication Technology is very useful in teaching and learning activities, because she can obtain more and more diverse learning resources so that she can explain and apply the material in more detail and can be understood by her students. Because by using a laptop and in-focus he can present various kinds of learning pictures and videos related to the material he conveys in class. However, unwanted obstacles sometimes occur, such as an unstable internet signal, and power outages that prevent teachers from being able to use in-focus.

2. According to teacher Nurbaiti, she was greatly assisted by ICT being able to finish inputting student learning outcomes data quickly, without having to write by hand and calculate using a calculator, by using various applications found on laptops such as E-raport applications, and excel, all that's left is to enter student grades then the total value and the average value will appear automatically. In addition, he can also use applications found on laptops to attract students' interest in learning, so that students are more enthusiastic and concentrated in participating in learning, such as various kinds of learning educational videos available on internet media.
3. Based on the information from the IQB teacher, the use of ICT is very helpful in delivering PJOK learning material. According to him, by utilizing ICT, IQB teachers can train students in floor exercises, rhythmic gymnastics and various exercises that use musical rhythms, as well as other PJOK material videos such as forward roll, back rolls, cartwheels and other PJOK material.
4. In contrast to the three teachers above, in the opinion of IM's teacher, he has a little difficulty in using Information and Communication Technology (ICT), besides the equipment he has is inadequate, he is also incapable of using ICT, based on the information obtained, he often asks the teacher for help who are proficient in using ICT in inputting the data and values of their students as well as their own personal data.

Every teacher should be able to keep pace with the progress of Information and Communication Technology (ICT), which is growing rapidly along with the times. A teacher is also required to be able to take advantage of technological developments to make it easier to carry out the teacher's obligations to deliver learning material that is creative, liked and does not make students bored, even makes students enthusiastic about participating in the learning process, besides that ICT is also expected to help teachers carry out work easily, effectively and efficiently. In terms of Information and Communication Technology (ICT) Skills Training for teachers at SD Negeri 11 Indralaya, not all teachers have had the opportunity to take part in this technology-based training, of the seven subjects studied, only three people had attended Technology-based Skills Training for Elementary School teacher levels, namely: teachers of SMN, KTN and ST MH, the training was held by the Office of Education and Culture of Ogan Ilir Regency, South Sumatra Province. Meanwhile, the other four teachers, namely SND, NK, and RN teachers, admitted that they had never participated in Information and Communication Technology (ICT) skills training for elementary school teachers, because they had not been given the opportunity from the school considering the number of participants from each school was limited. In each training, participants from each school are limited to a maximum of only 2 teachers. The training materials in the training are in the form of how to use Microsoft Office (Word, Power Point, and Excel) (Gunawan, 2014).

Information and Communication Technology (ICT) skills training for teachers is useful in managing learning. This opinion is supported by the NK teacher's statement which states that Information and Communication Technology (ICT) skills training is very useful, because it can help teachers in presenting interesting learning for students. The RN teacher added that training in Information and Communication Technology (ICT) skills would enrich learning materials, as well as foster creativity as a teacher in compiling interesting and fun learning materials. Meanwhile, SND teachers think that the training will add to the knowledge and skills of teachers. The problem that becomes an obstacle in mastering Information and Communication Technology (ICT) skills for teachers at SD Negeri 11 Indralaya is the age factor as found in SND teachers. SND is a teacher who graduated from SPG, and was 54 years old when the research was conducted. SND admits that the age factor is an obstacle to learning ICT skills.

In addition, SND also acknowledged that the geographical conditions at the school were located in an area where there was no internet tower, making it difficult for teachers at the school to access information via the internet. Whereas for NK teachers, AP teachers, and RN teachers who are much younger than SND teachers, the availability of tools is the dominant factor that hinders the implementation of ICT-based learning at SD Negeri 11 Indralaya. The next factor is the lack of knowledge and mastery of the programs controlled by the teacher. So far, the programs mastered by new teachers are up to the use of Microsoft Office only. Even though there are various kinds of programs provided to help convey material to students.

#### **D. Conclusion**

Based on the results of the research and discussion, it can be concluded that out of 26 teachers there are 5 PNS teachers and 3 TKS teachers at SD Negeri 11 who can be categorized as very good at using Information and Communication Technology (ICT) both in learning and in inputting data and students' grades. Based on the results of the study, the factors that hinder teachers' mastery of Information and Communication Technology (ICT) at SD Negeri 11 Indralaya are:

1. Teacher age factor
2. Teacher motivation and attitude,
3. Availability of teacher Information and Communication Technology (ICT) media facilities and infrastructure,
4. Geographical conditions and
5. Economic factor.

The researcher's suggestion is that teachers are expected to be more enthusiastic and more active in trying to improve their ability to master ICT Technology, be able to develop and utilize Information and Communication Technology (ICT) in the teaching-learning process. And add a lot of knowledge and insight regarding the use

of ICT both in classroom learning and in the process of inputting data using technology.

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