Chapter One

Introduction

This chapter shows the problem and the reasons why the topic of the research was chosen by the researcher. This chapter consists of background of the research, statement of the problem, limitations, research question, objectives of research, and significant. All the explanation is explained below.

Background of the Research

Technology is no longer becoming an unfamiliar thing in this era. Everyone must know it, use it, and collaborate with it. Technology provides all the facilities needed by human being and has a big influence in every aspect in one's life, including the way they communicate and the way they collect the information. Nowadays teaching and learning process is easier by the appearance of technology. It helps both students and teacher for their teaching and learning process. It is also stated by Singh (2012) that teaching and learning in the 21st century is full of technology that brings the ability to offer the material for teaching and learning process, all the needs that students and teacher want, in anytime and anywhere.

Technology cannot be separated from the educational field because education and technology are two things that are equally needed and mutually beneficial. The development of the education field seems to have never run out. Education always evolve in line with changing times and community needs, (Muchamad, 2018). It can be proven that nowadays almost all the school in Indonesia are using technology. Information and Communication Technology also

being a part of technology. Jenson, Taylor, and Fisher, (as cited in Maida, 2015) argued that the era of 21st century is learning that is possible and also supported through Information and Communication Technology (ICT).

Using ICT in the field of education is very helpful and facilitating the learning process. ICT develops very fast and fundamentally brings significant changes in the implementation of education. One of them is for learning. Learning is no longer dominated by the lecturing method, but the use of existing technology provides a new nuance in the education field, (Muchamad, 2018). ICT is a technology that can be used for creating the information, sharing the information, and communicate the information through voices, audios, images, etc. ICT device includes personal computer, radio, television, cellular phones, etc.

The use of ICT and education can be benefited for all the students, including special needs students. Everyone can use it, and there are no differences and gaps. ICT is a means for equality between normal students and special students because both can operate the ICT maximally. There is a specific ICT used by special needs students because not all the special needs' students fit to use the ICT tools. Nonetheless, ICT makes all the students have the same chance to learn, especially for special needs students. ICT also makes the students easier to learn. As perceived by the special needs' students, they will be motivated to learn and to participate during the class (Nordini, Yunus, & Zaharud, 2015). Even the use of ICT really makes the special needs students' especially hearing impaired got their achievement as well.

In addition, ICT has been widely used for special needs students. It is explained that the use of ICT has spread widely in every element of education including the education for students with special needs (Gardner, 2018). One of the studies conducted by Bonnah and Unwin (2010), revealed that ICT can significantly help the students with special needs. It is confirmed by Zarif (2014) who found that ICT can be used in multiple ways, namely improving instructional pedagogy, making the instructions more accessible, creating communicative bridge, motivating children towards learning, and helping the teacher in monitoring and evaluating the classroom learning.

There are several examples of the achievement by hearing impaired students. We already knew that the son of Ray Sahetapy named Surya Sahetapy is one of the hearing-impaired students who gets his achievement even until abroad. According to liputan6.com, Surya Sahetay is the one of Indonesian student who becomes the representative of NASA's event in US. He also becomes the committee of *GERKATIN (Gerakan untuk Kesejahteraan Tunarungu Indonesia)*. In relation to technology, Surya Sahetapy also becomes the content creator in one of the platforms of Social Media. He acts like a normal people as usual. Other examples come from one of the students of SMPLB N 1 Kulon Progo who becomes the first winner of Design Graphic in 2018. Based on the researcher's observation, one of the students from Kulon Progo also becomes the representative of DIY for becoming the participant in National competition of Design Graphic. Another example, based on jawapos.com, showed Nabilatul Fadhillah, a student who is good at art, won various competitions, such as

dancing, drawing and writing. She is a great writer, who can even become the runner up in the writing competition to beat other normal students.

Based on the data above, the researcher found that one of the state special schools in Kulon Progo Yogyakarta uses the ICT to support their teaching and learning process. It is a very good step conducted by the school to change the people perspective towards students with special needs. It is proven that three students with special needs in that school have already got some achievements in competition which deals with technology, such as blogging, writing for online competition, and many others. From many kinds of examples above, the researcher is interested to know the implementation of ICT, so that they can be good at learning using ICT, including the benefit and also the challenges which are perceived by the teachers.

However, the teachers who implement ICT for hearing impaired students may face several challenges. As stated by Yusuf, Daniel, Low, and Ab Aziz, (2014) the teachers are lack of skill and knowledge towards ICT. Besides, the limited resources make the teacher always use the same method to be taught towards their students with special needs. The last challenges appeared in this study showed that the difficulties of the teacher using ICT is that lack of the attention from the students with special needs.

Therefore, the researcher interests to pick the topic about this phenomenon, so the researcher understand how to utilize for special needs students with hearing impaired. The researcher would like to investigate how the

teachers' point of view on the ICT implementation for hearing impaired students including the benefits and the challenges faced by the teachers.

Statement of the Problem

In the use of ICT for hearing impaired students, there are still found some problems. Then, the problems may appear from the teachers, the school, and the students too. The teachers may be the main subject who feel difficult to implement ICT, especially for the hearing-impaired students. As emphasized by Yusuf et.al. (2014), most of the teachers still lack knowledge and skill towards the implementation of ICT. They also found that during the use of ICT for teaching and learning process, the teachers feel intimidated because of their minimum knowledge to operate it.

The other problems also come from the school which implemented ICT for teaching and learning process. The lack of facilities in the school becomes the main problems. It is emphasized by Yusuf *et.al* (2014) that the facilities in some schools are not supported to be used. There are a lot of devices that cannot work well when used. The other problems are staff motivation. Bonnah and Unwin (2010) stated that most of the school that implement the ICT for their teaching and learning process mostly lack staff motivation. The lack of special teachers for special students also become one of the problems faced by the schools.

For the students, they may also face the problem during their learning with ICT. It becomes the main problem appeared in the study by Nordini *et.al.* (2005), who found that the students' interests are low due to the limitations of existing

facilities. They are interested in learning to use ICT, but the school did not provide the facilities.

Limitations of the Problem

There are so many points which can be studied from the use of ICT for hearing impaired students. The problems also appear regarding the implementation of ICT for them. In this research, the researcher emphasizes the teachers' point of view regarding the implementation of ICT in learning for hearing impaired students. The teachers of one state special school in Kulon Progo, Yogyakarta are expected to explain their point of view based on their experiences during the implementation of ICT in their teaching process. This research specifically concentrates on the teachers' point of view on using the ICT for their teaching and learning process. In other word, this research focuses on the benefits and the challenges faced by the teachers.

Research Question

This research has a goal to answer these questions as follow:

1. What are the benefits of using ICT for special needs students with hearing impaired as perceived by the teachers?

2. What are the challenges faced by the teachers in using ICT for special needs students with hearing impaired?

Objectives of Research

Objectives of the research based on the background above is to find out:

1. The teacher's point of view about the benefits on the implementation of ICT for hearing impaired students.

2. The teachers' point of view about the challenges on the implementation of ICT for hearing impaired students.

Significance

There are four significance points of this research that might give valuable contribution to the teachers, the researcher, the schools, and also the future researcher. All the explanation will be explained below.

To the teachers. This research can give some recommendations to the teachers in the implementation of the ICT for teaching and learning process towards special needs students with hearing impaired. This research also expected that the teachers can consider applying the ICT to teach the hearing-impaired students, because there are benefits found in this research. In the other hand, the teachers also can be prepared to face the challenges appeared, so they can make it better. It is expected that this research can be the recommendation for the teachers in order to implement the use of ICT for their teaching and learning process.

For the researcher. This research provides much of knowledge to the researcher in order to have the deeper of understanding in making the good papers regarding the use of ICT for special needs students with hearing impaired. Also, it will make the researcher know more the benefit by using ICT for hearing

impaired students as perceived by the teachers. It also gives the researcher knowledge about the challenges that are faced by the teachers in using ICT. After the researcher knows about the challenges above, the researcher also can use the ICT for teaching hearing impaired students, also can anticipate the challenges by reading this research.

For the school. The use of ICT will give the positive impact for the special school that apply **t**he ICT program. Also, it can be consideration for the school to implement the ICT for their students, as technology becomes the prior thing in this era.

The future researcher. This research can be important point of view towards the use of ICT for special needs students. It can also be a reference to the next researcher if they would like to know more about the use of ICT for the special needs' students, especially for hearing impaired students as perceived by the students.

Outline of the Research

   This research consists of five chapters. The first chapter presents the introduction. Besides, it includes the background of the research, the statement of the research and the limitation of the problem, research questions, the objective of the research, and significances of the research. For the last of first chapter explains the outline of the research. The second chapter is the literature review of the research. It reviews the definition of the ICT, the use of ICT in education field, the definition of Special Needs Students, the definition of hearing impaired, the use of ICT for hearing impaired students, the benefit and the challenges of using ICT for hearing impaired students as perceived by the teachers, and the review of the related studies. The third chapter is research methodology. In this chapter, it includes research design, research setting and participant, research instruments, data gathering technique, research procedure, and data analysis. The fourth chapter contains the finding and discussion based on the data gathering. It contains four benefits and four challenges. The fifth chapter includes the conclusion and recommendation for the teachers, the next researchers, and for the school.