

CHAPTER I

INTRODUCTION

1.1 Background of the Research

Becoming a professional teacher in the 21st century is very important because currently technology is sophisticated and the millennial generation already has the skills to operate technological equipment properly and correctly. It would be nice for teachers to understand the needs of students by using modern technology. According to Jan (2017, p. 51) stated that teachers of 21st century have to take in account the needs of their students, prepare them to meet the challenges of future.

To become a competent teacher in teaching, a teacher must have a lot of creativity and knowledge. In addition, the role of students is also very important in the ongoing teaching and learning activities. According to Faulkner & Latham (2016, p. 145) stated that the categories of knowledge currently needed by students and teachers are Foundational Knowledge, Meta Knowledge, and Humanistic Knowledge. In this 21st century era, teachers used to teach using modern media. Media literacy has to do with the capacity for accessing, analyzing, evaluating and producing messages in various formats and media (Cerda et al., 2015, p. 1). By using media, teachers are greatly helped and easier to teach, even using media, teachers and students can access the internet. In this digital age, especially in industrial revolution 4.0, teachers must be more professional and keep up with modern times. According to Afrianto (2018, p. 1) stated that some characteristics of the IR 4.0 era are digitalization, internet of things, internet of people, big data, iCloud data, and artificial intelligence.

The development of industrial revolution 4.0 is very influential in several fields, including education. In the 21st century, students from all levels of education face extreme global competition, technology that is driven by information, and rapid media-saturation (Afandi et al., 2019, p. 1). In this era, the development of education technology clarifies the media education (Cerda et al., 2015), the characteristics of 21st century teacher (Jan, 2017), the importance of teacher's live in 21st century (Faulker & Latham, 2016; Mirici & Eksi, 2016), globalization and internationalization (Boholano, 2017; Nganga, 2017), the development of technology (Afandi et al., 2019), and industrial revolution (Afrianto, 2018).

According to Jan (2017, p. 51) stated that a good teacher can inspire and motivate students for being a good student. Teachers of 21st century have to take in account the needs of their students, prepare them to meet the challenges of future. A good teacher should have characteristics that make students happy to be taught with him. The teacher's friendly attitude seen and imitated by students.

Based on several research that have been reviewed by the researcher, there are three gaps that not discussed. The 21st teacher training is not discussed in previous research. Good teachers should receive teaching training from the center so that the abilities of the teachers have been formally tested and cannot be doubted. According to Voinea (2019, p. 1) stated that to prepare people for future we need teachers who are able to develop the 21st century competences. Teachers who have been trained in accordance with existing procedures should have higher teaching abilities than teachers who have not been trained. Training for teachers is very important so that the knowledge that is shared with students can be useful.

Technology is also not discussed in previous research. Technology is very important and very useful in this 21st century because all of anything today use technology, including in

he field of education. Therefore it is very important in the world of education to discuss education and it is also important for teachers to master

technologies for learning so that learning can be more interesting and not boring. According to Seethal (2019, p. 1) stated that educational institutions across the country started adopting modern methods of sharing knowledge to the students. According to Courville (2011) as cited in Francis (2017, p. 3) stated that the use of technology for learning has the benefit of increasing academic achievement from the perspective of both the students and the teachers.

Teacher competences are a very crucial thing for teaching and learning activities. If a teacher does not have teaching competence, learning not take place properly. Therefore, in order for learning to take place effectively, the teacher must have teaching competence and need teaching training in order to teach and operate modern learning tools properly and correctly. According to Foulger et al., (2017, p. 5) stated that teachers need to leave their teacher preparation programs with a solid understanding of how to use of how to use technology to support learning.

Based on several researches that have been reviewed, there are any gaps on those researches. This research can develop by those gaps, so that gaps as the critics for strength this research. The gaps that can critic the research are the 21st teacher training, technology, and teacher competences. Those gaps that are not discussed in previous research.

1.2 Identification of the Issue/Phenomenon

The teaching ability of a teacher is very important and must be developed a lot so that teachers understand and understand students more. In this 21st century era, teachers must make attractive teaching materials and must use effective teaching media, one of which is

technology. This topic is analyzed because students in this 21st century era use more modern technology which is increasingly sophisticated. According to Cerda et al. (2015, p. 3) stated that technological aspects have to do with skills and competencies to use educational digital devices.

Teachers in the 21st century era need the ability to operate technology for teaching and learning activities. According to Jan (2017, p. 1) stated that the 21st century teachers need teaching skills content mastery as well as integrating teaching with technology. If the teacher does not have the ability to operate technology, the students not receive the learning well. Because students in the 21st century era prefer modern technology for learning activities so that they are not boring.

According to the background of the research, the researcher identified phenomenon that probably happened. There is the identification of phenomenon; the COVID-19 pandemic encourages the teaching and learning activities via online in their home by use technology. According to real life, most of teachers especially old teacher in Senior High School have problems in technology-based learning. In online learning, teachers are required to operate technology for teaching and learning activities. However, the majority of teachers in Indonesia still have obstacles in carrying out technology-based learning. These constraints can not make learning activities optimal. In this COVID-19 pandemic, teachers are required to use technology that suitable to students' need. Thus, through the phenomenon of the research, researcher solve the problem about the ca use of teacher's problem in operate technology and the skills that teacher's need especially in online teaching and learning.

1.3 Delimitations and Focus of the Research

In this research, the researcher conducted interviews with 2 teachers and 3 students at SMAN 1 DUKUPUNTANG. The researcher chose 2 teachers as respondents who had the

criteria for having experience in teaching. And the researcher chose 3 student respondents with the criteria of 1 clever student, 1 less intelligent student, and 1 mediocre student. In chapter II, researcher focus on the needs of teachers in operating ICT, and in chapter III researcher focus on teacher's effort and 4C skills in the 21st century on speaking skills. The relationship between skill and

effort is that if the teacher has skills in teaching, then the teacher needs effort to develop these teaching skills so that learning objectives can be delivered.

Senior high school students are chosen because they are transitioning from adolescence to adulthood and the majority of them already understand technology especially ICT. English teachers at senior high schools usually use several learning media based on technology such as social media and several learning support applications such as zoom or even the web that is owned by the school itself. It is uncommon for students at the senior high school level to be more familiar with technology than the teachers who teach them, therefore teachers have to learn a lot and have the ability to operate technology in order to adapt learning to students at the senior high school level. Researchers took this title because in the 21st century skills are needed to operate ICT in learning, and currently online learning is taking place because of the impact of the COVID-19 pandemic, all teachers are required to do online learning and must be able to operate ICT to carry out learning activities.

With technology, the field of education can develop rapidly and become more advanced. In education, technology that used is ICT (Information Communication Technology), ICT is a learning media used in teaching and learning activities based on technology. In the world of education, teachers have a very important role, including the English teacher. English teachers who are professional and have good teaching skills are very

concerned about learning methods and media that are good and correct to support the needs of students in learning.

1.4 Research Question

This research has research questions as follows:

- 1) What are the skills needed of English teachers in using ICT?
- 2) What are the efforts of English teachers for teaching in the 21st century?

1.5 Aims of the Research

As formulated in the research question, the aims of this research are:

- 1) To know the skills of English teachers in using ICT
- 2) To identify the efforts of English teachers for teaching in the 21st century

1.6 Significances of the Research

This research is expected to give significant advantages bot theoretically and practically:

1.6.1 Theoretical Significance

Theoretically, the researcher hopes this research develop theory that can contribute in English teaching and learning. Thus, the researcher expects that this research increase the knowledge in the field of English teaching and learning

1.6.2 Practical Significance

Practically, the researcher expects that the English teachers can develop their skill in the use of ICT. Teachers also must know the needs of students in English learning. Thus, the researcher hopes that the use of ICT in 21st century can improve student's ability in English learning.

1.7 Theoretical Foundation

This section explores the theories for current research. The research topics to be discussed to the research title and the existing gaps. Researchers have provided theories that

refer to the references that have been cited. The research topic in this study is designing English language learning programs in the 21st century.

In this research, the topics that discussed in depth is based on the title. There are four topics that exist in this research: 21st century, English teacher's skills, technology and need analysis. The researcher discuss those four topics.

1.7.1 21st Century English Language Teaching and Learning

21st century is the modern era that have been developed, including in education field. According to Dunning (2000) as cited in Chu, et al. (2016, p. 1) 21st century is a period of globalized that competencies place greater emphasis on knowledge, mobility, and collaboration. According to Chu, et al. (2016, p. 1) stated that the 21st century is characterized by its rapid technological advancement. The kinds of 21st century are modern technology and ICT (Information, Communication, and Technology). In this 21st century, all aspects of life can use technology, especially in the education field.

The characteristics of 21st century learning can be built through the integration of ICT in the learning process. 21st century learning is expected to open wider job opportunities and expand employment opportunities for the Indonesian people as quality and superior human resources. To form quality human resources, educators are needed who are ready to teach and educate through 21st century learning.

In this century there is a lot of information circulating, and not even a little of this information is false information. If we do not have good information literacy, then we "eaten" by misleading issues that can harm us. On the other hand, according to Redhana (2019, p. 2240) stated that related to technological literacy, one must be able to use technology to communicate in the current digital era. All the skills needed

by a person to successfully face challenges, an increasingly complex and uncertain life, and to succeed in life and careers in the world of work are 21st century skills. A person does not have these skills since birth, but these skills are acquired through the process of practice, study, or experience.

1.7.1.1 Teacher Prepare for Teaching and Learning Activity in the 21st Century

The 21st century is also called the century of industrial revolution 4.0, the century of rapid development of science and technology. The rapid development of science requires teachers and students to be able to adapt and follow these developments. According to (Junedi et al., 2020, p.64) stated that developments that are so fast affect various aspects including the education aspect, for that it is necessary for students to be prepared to deal with it.

In this 21st century, all fields are progressing, especially in education. Education is regarded as the crucial acquisition of information and knowledge. According to Johan & Harlan (2017, p. 51) stated that education has the important role in develop country, if the country ignores education, it left by other country that support the education. (Boholano, 2017, p. 1) stated that education in the 21st century is about the globalization and internationalization. In this 21st century education, it is recommended for teachers and students to operate learning support technology in order to keep abreast of developments, especially in the field of education. (Handayani, 2017, p. 156) stated that based on the result of Round Table discussion by 72 Ontario District School Boards, learning or education can clarified into some conclusion; 21st century learning is about changing the types of problem solve for students, 21st century learning and technology, students are diving the learning and taking it deeper, classroom-based social media increase students collaboration. 21st

century education refers to developing education, literacy and life skills as part of the classroom experience. (National Council of English Teacher, 2013, p. 1 as cited in Zamzow, 2016, p. 1)

stated that students in the 21st century must have experience and develop skill with technological tools used in the classroom. (Silva, 2008, as cited in Zamzow, 2016, p. 7) stated that 21st century skill is the skill that must have in education nowadays because they place emphasis on what can be done with knowledge rather than what unit of students knowledge.

21st century learning can also be said as a means of preparing the 21st century generation. Where the progress of ICT which is growing so rapidly has an influence on various aspects of life, including the teaching and learning process. For example, students are given the opportunity and are required to be able to develop their skills in mastering information and communication technology, especially computers. That way, students have the ability to use technology in the learning process that aims to achieve students' thinking and learning skills.

Teacher preparation in facing the 21st century is needed in teaching and learning activities. The limited knowledge and preparation of teachers in facing the 21st century be an obstacle for teaching and learning activities. According to Junedi (2020, p. 63) stated that 21st century skills consist of communication, collaboration, critical thinking and problem solving skills, as well as creative and innovative. This skill needs to be implemented by the teacher in the learning process so that the quality of learning increases. (Septikasari & Frasandy, 2018, p. 107) stated that for this reason, in the 21st century, schools are required to have creative skills, critical thinking, communication, and collaboration or commonly referred to as 4Cs.

To be able to play a meaningful role in the era of globalization in the 21st century, every citizen is required to have the ability to respond to the demands of the times. This requires the role of educators to develop both hard skills and soft skills for students in learning at school so that they can enter the world of work and be ready to compete with other countries. The teacher prepares all tools such as curriculum, Learning Implementation Plans, and models or methods that are integrated with 21st century learning. By developing 21st century skills in learning, it is hoped that each individual have the skills to live in the 21st century with various opportunities and challenges faced in the era of advances in technology and information. All the skills needed by a person to successfully face challenges, an increasingly complex and uncertain life, and to succeed in life and careers in the world of work are 21st century skills. (Sugihartini et al., 2019, p. 306) stated that basic teaching skill is the skills or abilities of teachers to explain the concepts of learning material. Several experts explain the importance of mastering various 21st century skills as a means of success in a century where the world is developing rapidly and dynamically.

1.7.2 English Teacher

Teacher is a position that can transfer knowledge to students. Teachers are important indicators in teaching and learning. Teachers must have skills for teaching. (Aacte & p. 21, 2010, p. 11 as cited in Norahmi, 2017, p. 78) stated that the teachers are crucial elements in doing the teaching and learning process A teacher is the key and the main player education process. (Palmer, 1998 as cited in Afrianto, 2018, p. 1) stated that a perfect curriculum, complete educational facilities, detailed rules of the game or sophisticated legal instruments not have much effect on the success of education they are not supported by the teachers in the frontline. Teacher is the most

important aspect in education, especially in learning activity in the classroom. The teacher is someone who must have teaching skills so that students do not get bored and subject matter can be conveyed well and can be understood by students.

According to Uygun (2013, p. 307) stated that an effective English language teacher is the teacher who is clear and enthusiast in teaching that provides learners with the grammatical, lexical, phonological, pragmatic, and sociocultural knowledge and interactive practice they need to communicate successfully in English language. Besides must to have teaching skills, an English teacher is a teacher who must master all aspects that are conveyed to students.

1.7.2.1 English Teacher's Skill in Using ICT Device

The English teacher's skills are the skills that needed in teaching and learning with any innovation in teaching. (Handayani, 2017, p. 158) stated that the embodiment of effective English teachers should be begun with the understanding that English teachers should have certain characteristics as effective teachers. (Handayani, 2017, p. 158) stated that there are several characteristics that must have for English teacher: the adaptor, the visionary, the collaborator, the risk taker, the learner, the model, and the leader. Teacher must have those characteristics in teaching and learning, it can make students not boring when teaching and learning activity. The kind of English teacher's skills are creative and innovative. Teachers must be creative and innovative when teach the students. Teachers must inspire and motivate students for being the better.

According to Restu et al. (2018, p. 17) stated that there are some characteristics of effective English teacher, such as kind, humorous, patient, cheerful and easy smile, wise, and discipline. The teacher must be a kind person so that the

student must like him, before liking the lesson, the student must like the teacher first. The teacher must also have a humorous character so that it is not boring while doing the teaching and learning activity. However, it doesn't have to be humorous, there's time to get serious when studying. Teachers also must always be patient when teaching and dealing with students, especially students who are not easily regulated and often break rules. In addition, teachers must also cheerful and easy smile to give color and positive vibes in class. Teachers must also have wise characteristics so as not to make mistakes in making decisions and behave wisely in dealing with students. Apart from students, teachers also have to be disciplined, one of which is being punctual in teaching and not violating school regulations.

In the 21st century, teachers are required to have the skills to operate ICT and carry out teaching and learning activities using ICT technology. According to Becta (2010) as cited in Arifin & Setiawan (2020, p. 40) the characteristics of 21st century teachers are as follows: (1) 21st century teachers ensure that the quality of their learning is improved through the use of ICT. (2) 21st century teachers use ICT for all administrative processes, enabling them to save time. (3) 21st century teachers have implemented a modern assessment and online reporting system. Teachers also need to use technology in the classroom. Especially now that there are many online learning applications that can be done by downloading the application. According to Andriani (2015, p. 138) stated that Some of the media that can be used in Information Technology and Technology (ICT) based learning, are: (1) mobile phone/smartphone, ICT-based learning can also be done using smartphone media, this can be done because of the rapid advances in smartphone technology. (2) CD-ROM media or flashdisk, can be an option if the internet network connection is not available. (3) Computer/laptop, is used as ICT-based learning media to access the internet.

1.7.2.2 English Teacher's Competence in Teaching and Learning Activity

Teachers have an important role in education. Therefore, the success of education in a country is strongly influenced by the strategic role of teachers. That is the reason the competence of teachers must continue to be improved along with the times. (Saragih, 2008, p. 23) stated that teacher competence is the knowledge, skills, and behaviors that must be possessed, internalized, and mastered by teachers in carrying out their professional duties. Professional teachers must have and master several competencies and knowledge.

Before become a teacher, all prospective teachers are trained and equipped with matters related to the teaching profession in a field experience program (PPL). So the success of prospective teachers in PPL activities proves their success in carrying out the teaching profession later after they assume teaching positions. Even though he has participated in the PPL program and has passed with good grades, after serving for several years at the school he still has weaknesses. These weaknesses can be seen in their relationship with senior teachers, their relationship with students, their relationship with the principal, teaching preparation, provision of teaching aids, how to manage classes, how to explain the material, how to ask questions, and their mastery of the subject matter.

Basic teaching skills are abilities or skills that must be possessed by teachers in order to carry out teaching tasks effectively, efficiently and professionally. According to Bantang (2008) as cited in Syamsinar & Jabu (2015, p. 9) stated that there are some competence that have to be a profesional teacher. The competences are: (1) Mastering the subject taught. (2) Planning the lesson. (2) Managing the class.

(3) Being able to use instructional media. (3) Understanding the students' characteristics.

In other hand, According to Madjid (2019) in teaching there are two main abilities that must be mastered by a teacher, namely: (1) Mastering the material or teaching materials that delivered to students. (2) Mastering the methodology or method of delivering the material (P. 1). If you have these two abilities, a teacher can already teach and is able to become a professional teacher.

1.7.2.3 English Teacher's Role in Teaching and Learning Activity

Teacher preparation program provide educators with the tools, mentors, hands-on experiences that they need to begin the career. (Archana & Rani, 2016, p. 1) stated that n the classroom, teacher roles can be discussed with the students as a part of students preparation, along with other characteristics or curriculum. English language teacher play a crucial role in teaching and learning process. (Restu, et al., 2018, p. 1) stated that teacher capability in teaching the subject and transferring the knowledge determines the success of students in their academic achievement. Teaching aims so that the knowledge conveyed can be understood by students. Therefore, teaching is said to be good if the learning outcomes of students are good. This statement can be fulfilled if the teacher is able to provide good learning facilities so that a good learning process can occur.

In addition, there are several roles of the teacher to make the learning process conducive and to create an active and effective classroom. This study takes the theory from Brown & Harmer (2007, p. 108) it classifies the teacher's role in detail so that it make it easier for researchers to conduct research. After combining their theory, it can be summarized as follows: (1) Teachers as Controllers: They are in charge of the

whole class and taking place activities and often lead, instruct students, organize exercises, explain material. (2) The teacher as a resource: At this stage, the teacher can be one of the most important resources in the teaching and learning process. Teachers can provide all the information needed by students. In other words, the teacher is a source of information that students can rely on when they face difficulties. (3) Teachers as Tutors: acting as tutors, teachers can combine the roles of reminders and resource persons during the teaching and learning process. In these cases, tutors work with students individually or in small groups if they are undertaking a challenging learning program. (4) Teacher as Assessor: Offers students the correction of their linguistic errors while assessing their language learning competence. (5) Teachers as motivator: Teachers as motivator means that teacher must motivate students for their study and so that they have big motivation for study.

A good teacher must be able to control the class and manage student learning time, the teacher must also know the needs of students, especially in learning in the classroom. Teachers have several important roles in classroom learning activities. Teacher as a controller, namely the teacher must control and supervise students so that students can be controlled. Teachers must also be the center of attention when learning in class. Teacher must be the resource for students, it means that if students need knowledge or have questions about learning, the teacher is expected to be able to solve problems or provide answers to these questions. Teacher as a assessor, in this context teachers are expected to be able to objectively assess students according to their performance. Teachers are also expected to become organizers, this means that teachers must have a plan for teaching today and beyond, teachers must also provide clear instructions for students so that students can follow them well. Teacher also must be a tutor for students, it is the crucial role for teacher. In becoming a tutor, the

teacher must guide and become a coach when students are involved in project work or individual study.

1.7.2.4 English Teachers Strategy for Teaching and Learning Activity

Learning strategies are very important in the learning process, but before implementing a learning strategy, the most important thing is to prepare a learning plan, usually this plan is prepared by a teacher before carrying out the learning process which is useful to make the learning process run as it should and according to the teacher's learning targets. planning from a teacher is usually like the preparation of a teacher when doing learning is that the teacher must first have a learning strategy which in this case can facilitate the teacher's steps in the teaching process later. In general, strategy has the meaning of an outline of the direction to act in an effort to achieve the goals that have been determined. Associated with teaching and learning strategies can be interpreted as general patterns of student teacher activities in the realization of teaching and learning activities to achieve the goals that have been outlined. According to Kitsner et al., (2015, p. 176) teaching and learning strategies is one important aspect of the consistently claimed promotion of self-regulated teaching and learning activity in classrooms. Strategy is something that is prepared by the teacher before the start of teaching and learning activities so that it can run smoothly according to the plan and learning objectives.

Recent technological advances have affected many areas of life, such as ways of communicating, collaborating, learning, and, of course, teaching. The development of science and technology is so rapid, this applies globally. The use of the internet and social media does not escape the impact of students. So the teacher must respond in

learning. For example, giving assignments by using the internet, or directing students to study online. Teachers can also direct children to download subject matter in the form of learning tutorials or practice questions in certain lessons.

According to Arifin & Setiawan (2020) there are several strategies in teaching for teachers: (1) Collaborative learning. Collaborative learning is used to increase the potential for active exchange, critical thinking, and achievement. (2) Blended learning. Blended learning is a combination of the characteristics of traditional learning and electronic learning environments. This strategy combines face-to-face learning with electronic learning such as video and audio. (3) Learner-centered classroom learning. When students have access to whatever information is possible, of course the teacher does not need to explain the material by lecturing.

1.7.3 Technology

According to Sivalingam & Subbaiyan (2018, p. 1) stated that technology has experienced expansion in recent years, leading to its extensive use by all generation. For all generations, especially the younger generation, technology is very important to interact in cyberspace and in education. The majority of young generation have to access the computer, internet, phone, video game, and many other form of technology. According to Dehmler (2009) as cited in Sivalingam & Subbaiyan (2018, p. 1) stated that asserts that children nowadays are growing up in an interconnected, network world. The younger generation now grows and develops in a world dominated by modern technology, so that the majority of them can operate technology by themselves, even technology has become an integral part of everyday life.

The impact of technology on education has occurred especially in this 21st century. (O'hara & Pritchard, 2014 as cited in Fu et al., 2016, p. 5) stated that the

researcher state that technology brings opportunities to create and adjust the students' individual knowledge with the experiences in technology provides. (Honey, 2005 as cited in Sivalingam & Subbaiyan, 2018, p. 3) stated that technology can facilitate exploration integration of information, high-level thinking and profound engagement by allowing students to design, explore, experiment, access information and model complex phenomenon. In this era, technology needed for teaching and learning activity. In this 21st century, besides facilitating the development of technology, should also facilitating the characteristics of present students, called millennial. (Monaco & Martin, 2007, p. 44 as cited in Norahmi, 2017, p. 81) stated that the students, in the case, are different to the previous generation in their sensibility of technology and personality. (Handayani, 2017, 158) stated that more over, the 21st century learning should promote democratic classroom where students involve in decision-making and meaningful learning. Technology is divided into several types according to the field, such as medical technology, transportation technology, and ICT which are commonly used for education.

1.7.3.1 Technology for Medical

Medical technology plays an important role in medical science. With the technology in the medical field, the process of treatment and medical actions to cure patients becomes easier and faster. With the help of technology, doctors can make a more precise diagnosis.

The benefits of technology in the medical field help the healing process faster. With sophisticated equipment, surgery can be performed with the help of a computer. Surgical wounds become smaller and medical procedures are performed more quickly. The examples of medical technology include three-dimensional ultrasound,

X-ray, and health consulting applications. With this medical technology, diseases that were previously difficult to cure can be treated better.

According to Djunaidi & Barsella (2018, p. 19) the function of computer nowadays is very important, with the existence of computer the benefits are felt not only by the user or users but also by related agencies, such as clinics, health centers and hospitals. The benefit of the computer should also be felt by the patient, because the main service for every health institution is to the patient, so the main thing is that which is felt directly by the patient.

In the health sector, we have experienced many benefits with computers, now it is not just information technology that runs in health facilities, the development of computer and information technology has entered the realm of Personal Health Record (PHR). According to Djunaidi & Barsella (2018, p. 1) stated that an example of PHR products that have been widely used in the health world is in the form of telemedicine, which is a form of remote home care technology. Patients stay at home and health workers only check their health, especially heart patients who live at home, so the device in the form of a wristband can send a signal to health workers if the patient's health changes.

1.7.3.2 Technology for Transportation

Along with the development of an increasingly modern era, more and more developments are taking place in this world which is increasingly advanced and sophisticated. Especially in this era of globalization, everything we need can be accessed easily. One example is the rapid development of transportation technology. Transportation technology is a technology that is able to support the transfer of people or goods from one place to another by using a vehicle driven by humans or machines, then transportation itself is used and created to facilitate humans in carrying out daily

activities. Today's transportation technology has shown very rapid progress in both land, water and air transportation. The facilities and infrastructure are also getting complete and good. The means of transportation technology are in the form of means of transportation such as cars, trains, ships and airplanes. Meanwhile, transportation technology infrastructure is supporting the smooth transportation of, among others, roads, bridges, terminals, stations, airports and ports.

To meet the needs of the community, several companies that provide online transportation application providers have been born. According to Aziah & Adawiya (2018, p. 150) stated that online transportation is one example of the development of application-based technology which was quite well received at the beginning of its emergence because it is considered one of the best innovations today. The public's preferred mode of transportation, which was previously offline, has now innovated to become online and more modern. In the context of the 21st century, according to Amajida (2016) as cited in Aziah & Adawiya (2018, p. 151) said that technology has encouraged the development of a digital society. People can now be connected to the internet all the time and digital devices are connected to the internet in almost all locations.

1.7.3.3 ICT (Information and Communication Technology) for Education

ICT stands for Information and Communication Technology. It refers to technologies that provide access to information through telecommunication. There are many ways that schools can do in utilizing ICT-based learning. Currently, there are many models of learning approaches that utilize ICT. Among these several approaches, of course, not all of them can be applied at once in the learning process. In this case, the school and the teacher must choose the right learning media according to the learning material and student potential.

In ICT-based learning, in addition to using computer devices equipped with software, to support ICT performance, it must be supported by an adequate internet network. This allow students and teachers to carry out learning activities not always face to face, but can be done online that is connected to the internet network. This kind of learning also allows students to be able to learn more independently and explore knowledge, not only fixing on the material given by the teacher in class. The students can use the internet to enrich the subject matter. Learning that usually uses the internet is known as e-learning. Currently, the use of e-learning has been widely developed by several schools, especially at international standard schools whose operational standards are required to implement ICT-based learning. ICT is a tool used in the learning process by utilizing information and communication technology. In this system, the interaction between teachers and students does not have to face each other physically as in the conventional education system, they meet in the information technology space (internet) by utilizing a media. According to Andriani (2015, p. 138) stated that some of the media that can be used in ICT based learning, are:

- 1) ICT-based learning can also be done using smartphone media, this can be done because of the rapid advances in smartphone technology. A person can access learning materials, take lessons through smartphone. So sophisticated is the development of this technology to bring up a new term in IT-based learning called M-learning (mobile learning).
- 2) CD-ROM media or flashdisk can be an option if the internet network connection is not available. Learning material is stored in the media, then opened on a computer. The use of CD-ROM/flash disk media is the simplest and cheapest form of IT-based learning.

- 3) Computer is used as ICT-based learning media to access the internet. One alternative that can be used as a learning media is a computer, with a computer as a learning medium, a teacher is expected to be able to convey subject matter to make it more interesting so that it is expected to be able to improve learning outcomes. And allows students to understand and understand something easily to remember it for a long time compared to the delivery of subject matter by face-to-face and lectures without learning aids or media.

1.7.3.4 ICT Product for Teaching and Online Learning

In this 21st century era, technology and ICT are really developed, especially in education field. Nowadays, most of students can operate the technology, so that teachers must know and must follow the student's need with technology. (Norahmi, 2017, p. 1) stated that the most of students expected the 21st century teachers have skills in teaching learning activity and can connecting the development of today's technology and today's students need. In the educational field, the need analysis is crucial for develop the characteristics and the need of students and teachers in teaching learning activity. According to Wernely (2018) as cited in Umardulis (2019, p. 873) stated that the advantages that can be obtained from the use of ICT in education include:

- 1) Being able to access information from other people's research.
- 2) Access to knowledge sources can be done more easily.
- 3) Access to experts becomes easier because it is not limited by distance and time.
- 4) The subject matter is delivered interactively and interestingly.
- 5) Through distance learning, cost and time constraints that may be unavoidable with regular education can be overcome by taking online classes.

In conducting online learning, a supporting application or platform is needed. The digital platform is a program that can support the success of online learning. According to Rachmawati et al., (2020) as cited in Assidiqi & Sumarni (2020, p. 301 there are several platforms that can be used in the implementation of online learning including Google Classroom, Edmodo, Learning House, Teacher Room, Your School, Smart Class, Zenius, Google Suite for Education, Microsoft Office 365 for Education (Mirzon Daheri, Juliana, Deriwanto, 2020). In addition to these platforms, there are other digital platforms that can be used during learning, including Whatsapp Group, Zoom, YouTube, E-Dictionary, Duo Lingo, Elsa Speak and Quizizz. Online learning provides opportunities for students to learn with the flexibility of learning time and wherever students and teachers are located. Students can interact and communicate with teachers using several applications such as google classroom, video conference, telephone or live chat, zoom or via whatsapp group.

1.7.4 Need Analysis

According to Jordan (1997) as cited in Ulum (2015, p. 16) stated that need analysis is the preliminary stage of designing courses, syllabuses, materials, and the sort of educational activities that take place. (Hedgcook & Ferris, 2009, p. 118 as cited in Satria & Destianingsih, 2017, p. 49) stated that need analysis is the needs to be understood as something that teachers can see and do as part of teaching. Need analysis is a crucial factor that must be discovered and negotiated in language teaching and learning. (Jordan, 1997 as cited in Ulum, 2015, p. 16) stated that the kinds of need analysis are target situation analysis, present situation analysis, deficiency analysis, strategy analysis and means analysis. In other hand, need analysis can define as a specific ground for the development of education and acadmic

activity of a particular group of students. Need analysis is useful tool for understand the students and teachers need and to help implementation of education field.

1.7.4.1 Students' Need in Listening Skill

Listening is probably the least explicit of the four language skills, making it the most difficult one to learn. It is evident that children listen and respond to language before they learn to talk. When it is time for children to learn to read, they still have to listen so that they gain knowledge and information to follow directions. In the classroom, students have to listen carefully and attentively to lectures and class discussions in order to understand and to retain the information for later recall. Teaching listening can be hard for teachers and students both. Students who are fine with speaking at their own pace and reading may have trouble listening to a recording that is a regular-speed conversation. Listening is often confusing for an English learner. According to Sularti et al. (2019, p. 247) stated that some practical suggestions to enhance students ability in listening are delivered are: help students to build confidence and increase their interest, help students to gain necessary knowledge about pronunciation, guide students to have correct listening habits, improve their listening skills by reading more, and instruct students to have more extensive listening in their spare time.

1.7.4.2 Students' Need in Writing Skill

Writing skill is specific abilities which help writers put their thoughts into words in a meaningful form and mentally interact with the message. Writing skill helps the learner gain independence, comprehensibility, fluency and creativity in writing. writing is a process that occurs over a period of time, particularly if the writer takes account the sometimes extended periods of thinking that precede

initial draft. In writing, the writer needs a time to do some processes inside. The length of the time is different among writers. Some need a longer time to just think about what to write before making the initial draft. According to Utami et al. (2012, p. 2) stated that here are some types of writing skills that students need: Comprehension skills for writing include understanding that writing is communicating a message or information and fluency skills for writing include recognizing linear sequences of sounds, mastering writing movements and letterforms, recognizing word fragments, recognizing the need for spaces between words, and writing quickly.

1.7.4.3 Students' Need in Reading Skill

Reading is the act of seeing and understanding intent. This is because in reading, readers are required to use their eyesight to understand some words or sentences and make them meaningful. Reading is making meaning from print and from visual information. Reading is an active process that requires a great deal of practice and skill. Some people consider the act of reading to be easy to master. In reality, reading is a complex process that uses many different skills. These skills lead to the ultimate goal of reading: reading comprehension, or understanding what has been read. Here are six essential skills needed for reading: (1) Decoding, is a crucial step in the reading process. Students use this skill to sound out words they have heard before but haven't seen written out. (2) Fluency, to read fluently students need to instantly recognize words, including words they can not sound out. Fluency speeds up the rate at which they can read and understand text. It is important when students encounter irregular words, like of and the, which can not be sounded out. (3) Vocabulary, to understand the text, it crucial to understand most of the words in the text. (4) Sentence construction and cohesion, understanding how sentences are built

might seem like a writing skill. Might connecting ideas within and between sentences, which is called cohesion. However these skills are important for reading comprehension as well. (5) Reasoning and background knowledge, most readers relate what they have read to what they know. So it is important for students to have background or prior knowledge about the world when they read. (6) Working memory and attention, when students read, attention allows them to take in information from the text. Working memory allows them to hold on to that information and use it to gain meaning and build knowledge from what they are reading.

1.7.4.4 Students' Need in Speaking Skill

In carrying out learning activities, teachers must adjust the needs of students according to what they need. The abilities and needs of students are different, therefore the teacher must adjust the abilities and needs of students. Students born with different needs. Students who have a high IQ have different needs with students who have a low IQ. Destianingsih & Satria (2017, p. 49) stated that the teacher analyzes what students need and what kind of teaching and learning materials taught to students. So, it is important to identify and analyze the target needs and learning needs. As future hope, students have many needs compared to other humans, but in general students have needs, students need potential guidance, students need education, need knowledge, need infrastructure and health. A need analysis is very effective effective in evaluating students' needs in relation of English for the academic, specific, and purposes.

Teachers are required to know the needs of students, including the needs of speaking skills in the 21st century. Because when communicating in the outside world and competing in the 21st century, communication using an international language is

very much needed. According to Junedi (2020, p. 63) stated that 21st century skills consist of communication, collaboration, critical thinking and creative or innovative. This skill needs to be implemented by the teacher in the learning process so that the quality of learning increases. (Septikasari & Frasandy, 2018, p. 107) stated that in the 21st century, schools are required to have creative skills, critical thinking, communication, and collaboration or commonly referred to as 4C skills.

In this 21st century, it is very important for someone to master English to communicate with native speakers or when someone is going international because English is a second language. According to Cameron (2001, p. 40) stated that speaking is the active use of language to express meaning so that others can understand it. Speaking is used to communicate and interact with someone. Speaking skill is very crucial and needed to compete in the 21st century. This statement is reinforced by Richards (2008, p. 19) as cited in Nirmawati (2014, p. 8) stated that mastery speaking skill in English is a priority for second language learners. Consequently learners often evaluate their success in language learning as well as the effectiveness of their English based on how much they feel they have improved in the spoken language proficiency.

The students need to acquire some speaking aspects to have a good speaking skill. As proposed by Brown (2001, p. 168), those aspects are: (1) pronunciation, pronunciation is the way a certain sound or clear sounds are produced. (2) fluency, fluency is an ability to speak quickly and automatically. (3) vocabulary, to be able to speak fluently and accurately, speaker should be mastering enough vocabulary and has capability to use the vocabulary correctly. (4) accuracy, the speakers need

to follow the rules of the language such as grammar and structure to be able to speak accurately.

1.8 Previous Research

There are several previous research related to the topic in this research. It is very crucial for complete the theory in this research. The several previous research discussed in this section. The previous research is very closely related to this research and related to the cluster in this research.

The first previous research is conducted by Handayani (2017) entitled *Becoming the Effective English Teachers in the 21st Century: What Should Know and What Should Do?* This previous research focuses on become the effective teacher and the need of 21st century teacher. The conclusion in this previous study is being the effective English teacher in the 21st century is the demand to prepare students for successful achievement in learning, life, and work. Based on the analysis, it is critically to shedding more light on the findings of this research about what matters English teachers should know, they are the 21st century skills and learning, the characteristics and skills of effective English teachers, the roles of effective English teachers, and several endeavors to actualized effective English teacher. Based on this previous research, it can be concluded that being effective English teacher in the 21st century is demand to prepare students for better and successful achievement in learning, life and work. To be the effective English teacher, it should comprehend the theory of 21st century, those are 21st century skills and learning, the characteristics and role of English teacher in the 21st century.

The second previous research is from Norahmi (2017) entitled *21st Century Teachers: The Students Perspectives*. This previous study use questionnaire for

collecting the data. A survey research was conducted to collect respondents' opinion as the main source of data to describe whether the 21st century teacher are on the demands and to gain information that the students have a similar perception to teacher's competencies required by the government. The result of questionnaire analysis revealed that most students expected the 21st century teachers to have skills in teaching and in connecting it with the development of today's technology and today's students characteristics. The data showed that the students constructed the same characteristics of teacher's competencies required by the government regarding pedagogy, personality, sociality, and professionalism.

The third previous research is conducted by Hafifah (2020) entitled *Teachers Perspective of ICT Integration in English Language Teaching: A Review of Literature*. This previous study proposes further study on the related topic area on teachers' cognitive of ICT in ELT. This previous study reviews several studies focusing on teacher's perspective on the use of information analysis take a closer investigation on the subject of the research, findings, and methodology of the research. It compares and synthesizes 38 articles related to teachers' cognition and perception on ICT and taken from journals published during 2001-2019. This previous analysis takes a closer investigation on the subject of research, findings of the research and the methodology of the research.

The next previous research is from Assidiqi & Sumarni (2020) entitled *Pemanfaatan Platform Digital di Masa Pandemi Covid-19*. This previous study aims to explain what digital platforms are often used in online learning. Besides Whatsapp groups, the digital platform that is often used is Zoom cloud meeting. The use of zoom cloud meetings in learning makes teachers and students feel as if they are in class because with this application teachers and students can communicate even face to face via laptop or handphone screens. The use of this application is very helpful in

delivering material, the interaction between teachers and students is more intertwined. The next widely used digital platform is Google Facilities. There are three Google facilities that can be used when learning online, namely Google Classroom, Google Form, and Google meet. Google Classroom is an application created by Google that aims to make it easier for teachers and students to carry out learning.

The next is previous reserach from Asrul & Hardiyanto (2020) entitled *Kendala Siswa Dalam Proses Pembelajaran Daring Selama Pandemi Covid-19 Di SMPN Satap 1 Ladongi*. This study aims to determine the obstacles of students in the online learning process during the COVID-19 at Satap 1 Ladongi Junior High School. This previous study used qualitative research methods. The subjects of this study were seven teachers at Smpn Satap 1 Ladongi. From the results of observations at Smpn Satap 1 Ladongi, the results of this study discuss students' obstacles in the online learning process during the covid-19 pandemic. During the COVID-19 pandemic, students carried out the teaching and learning process through whatsapp media but this method was less effective to be applied permanently because there were still many factors that hindered its implementation.

The next previous research is from Kardo & Yuzarion (2017) entitled *Sikap Guru Terhadap Peserta Didik Dalam Belajar*. This research is motivated by the phenomenon of teacher attitudes towards students. The sample of this research is 314 students of SMAN Malang City. The data were collected with the instrument of the teacher's attitude towards students valid and reliable. The results of the study, the findings of teacher data according to students' perceptions have supported the learning process, this is illustrated by the attitudes: (1) teachers care about the learning process and show kindness; (2) teachers have shared responsibilities well; (3) sensitive teachers accept the diversity of students; (4) teachers can improve instruction in learning; and (5) the teacher has been able to properly encourage the creativity of students.

Then, there is a previous research from Rahim (2011) entitled *Pemanfaatan ICT Sebagai Media Pembelajaran dan Informasi Pada UIN Alauddin Makassar*. UIN Alauddin Makassar is one of the universities that lives in a global environment, so like it or not, it must also be involved in the advancement of science and technology

mastery, especially for the benefit of the university itself. To achieve this goal, UIN Alauddin Makassar put it in one form of the program's goals and directions, namely the mastery of computer technology in the academic community. The direction of mastery of computer technology for the academic community is intended to: (1) determine the success of the learning process, academic administration and financial administration; (2) accelerating the improvement of intelligence and ability of the academic community in computer technology; and (3) to accelerate the renewal process in academic administration and financial administration.

The next previous research is from Ceha, et al., (2016) entitled *Peningkatan Kemampuan Guru Dalam Pemanfaatan Teknologi Informasi Pada Kegiatan Pembelajaran*. The main problem faced by education today is that the ability of teachers to use ICT for learning activities has not been evenly distributed. In addition, there is still a gap in ICT literacy between regions on the one hand and the development of the internet which also has a negative impact on community values and norms, so it is necessary to make active efforts from all schools to improve the quality of learning by utilizing information and communication technology. The proposed community service activities aim to increase teacher knowledge regarding the use of information and communication technology in learning activities, improve the ability of teachers to make teaching materials using information and communication technology so as to optimize the potential that exists in partner schools in the use of Information Technology to improve the quality of learning.

The next is previous research from Andriani (2015) entitled *Sistem Pembelajaran Berbasis Teknologi Informasi dan Komunikasi*. To be able to take advantage of ICT to improve the quality of learning, there are three things that must

be realized that are: (1) students and teachers should have access to digital technology and the Internet in the classroom, school, and teacher education institutions, (2) must be available the material quality, meaningful and cultural support for students and teachers, and (3) the teacher should have knowledge and skills in using tools and digital resources to help students to increase academic standards. The development of information and communication technology has an impact on all areas of human life, including education. Utilization of information and communication technology in education can improve the quality of learning. The pattern of learning by utilizing information and communication technology changes the roles of teachers and learning participants.

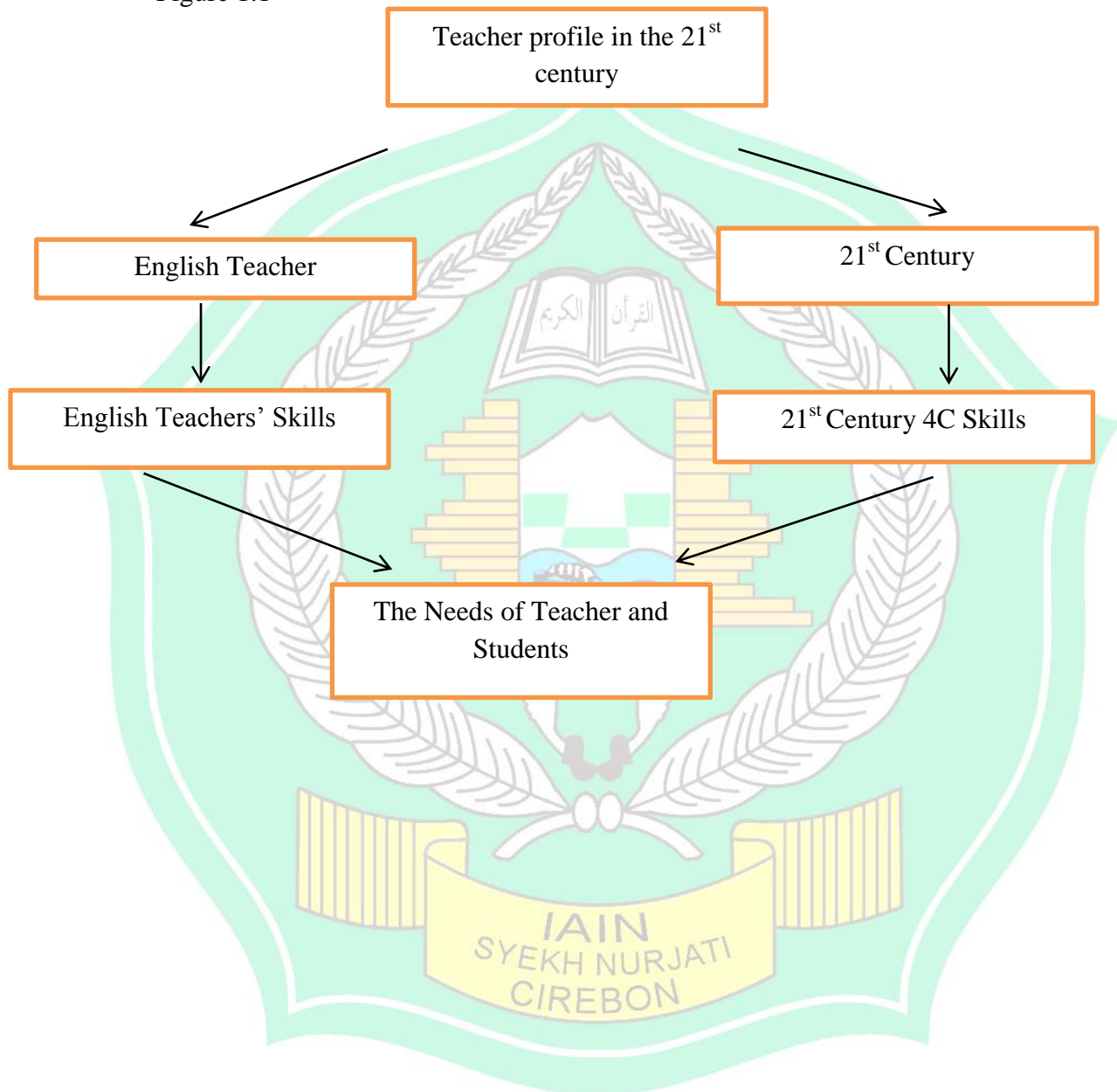
The last previous research is from Saragih (2008) entitled *Kompetensi Minimal Seorang Guru Dalam Mengajar*. According to this study, teacher competence is a set of knowledge, skills, and behaviors that must be possessed, internalized, and mastered by teachers in carrying out their professional duties. Teacher competencies as learning agents at the primary and secondary education levels as well as early childhood education include: pedagogic, personality, professional, and social competencies. In terms of skills, a teacher must master teaching skills, namely: opening and closing lessons, asking questions, giving reinforcement, and conducting teaching variations. In the teaching and learning process, the teacher plays a role as a director as well as an actor and is a very dominant factor in determining the success of the teaching and learning process in the classroom.

Those ten previous research can help this research as the booster for the researcher to research this study. Most of them investigate the need for being good

English teacher in 21st century. Those previous study needed for boost this research and for deep the theory for finishing this research.

1.9 Frame of thought

Figure 1.1



The frame above refers to the big title or main title of this research, namely Teacher's Profile in the 21st Century. In the profile, teacher in the 21st century contains two topics, namely about teacher and 21st century. An English teacher must have English teaching skills, one of which is to understand the development of modern technology used in learning in the 21st century era. In teaching English using modern technology, English teachers must have the input and elements needed to improve teaching skills in using technology.

1.10 Research Method

In this section, research methodology is divided into several parts, those are: research design and steps of the research, source and types of data, data collection techniques and instruments, data analysis techniques and research timeline.

1.10.1 Research Design and Steps of the Research

This research uses qualitative method that describe the phenomena in the field. Qualitative research is the research that use word for interpreting data, it cannot be calculation or statistic form. The design of this research is case study. According to Creswell (2012) stated that qualitative research can suited to address a research problem in which you do not know the variables and need to explore. (Sugiyono, 2016, p. 213) stated that in qualitative research, the theory used must be clear, because the theory is used to clarify the problem under study, as a basis for formulating hypotheses, and as a reference for compiling research instruments. To answer the first and second research question of the first and second question use interview session. There are several steps to conduct the research. These steps taken from several points by Lodico, et al., (2006) theory. These steps are: (1) Selecting participants. (2)

Writing foreshadowed questions. (3) Collecting the data. (4) Analyzing the data. (5) Interpreting and disseminating results.

1.10.2 Sources and types of data

To conduct the research, researcher provide two sources related in this study as follows:

1.10.2.1 Primary Data

The primary data source that researcher choose is English teacher. The researcher conduct the interview with English teacher in Senior High School. The English teacher chosen because researcher wants to know the English teacher's view of English teacher's skills in using ICT for teaching.

1.10.2.2 Secondary Data

The secondary sources of this research use the theories or references related that support the inquiry. The source taken from book, journal, thesis, etc.

1.10.3 Data collection techniques and instruments

In qualitative research, the main instrument that plays an important role is the researcher itself. In qualitative research, the researcher is an instrument because everything in research such as problems, research focus, research procedures, hypotheses used, even the expected results cannot be determined with certainty beforehand, all these things still need to be developed again during the research, and only researchers itself is the only instrument that can achieve these things (Nasution, 1988, as cited in Sugiyono, 2016, p. 223). The researcher use interview for collecting the data.

For the data collection technique, the researcher use interview. Collecting data with this interview technique involves researcher and respondent that use question and answer section. The reason researcher use interview because to find out the detail or valid data from respondent. To conduct interview, researcher use several

instrument for getting the information, for instance phone for record and paper for write some informations. The researcher conduct interview to get the information by the English teacher's view of English teacher's skill in using modern technology for teaching.

1.10.4 Data analysis technique

In qualitative research, the main instrument that plays an important role is the researcher itself. In qualitative research, the researcher is an instrument because everything in research such as problems, research focus, research procedures, hypotheses used, even the expected results cannot be determined with certainty beforehand, all these things still need to be developed again during the research, and only researchers itself is the only instrument that can achieve these things (Nasution, 1988, as cited in Sugiyono, 2016, p. 223). This research use the data analysis technique steps by Sugiyono (2016). There are three steps in analyzing the data, the first step is data reduction, second is data display, and the last is conclusion drawing (Sugiyono, 2016, p. 247-252). Researcher use interview for data analysis technique.

The data analysis techniques in this research adjusted to data collection techniques. This research takes theory from Lodico, Spaulding & Vogetle (2006, p. 301-302) for the techniques of analysing data. There are several steps to analyse the data:

1.10.4.1 Preparing and organizing the data

The first step in data analysis is to ensure that the data can be analyzed. Depending on time and resources, researchers may choose two English teachers. The technique used in this research is interview.

1.10.4.2 Review and explore the data

The next step is review and explore findings through providing various literature. Therefore the researcher needs accuracy and good prior knowledge to each response, in order to it can be analysed correctly according to compatible indicators.

1.10.4.3 Code data into categories

In describing the data, the researcher added a code in each respondent. The data is labelled 'T1' for teacher 1, 'T2' for teacher 2.

1.10.4.4 Reporting and interpreting data

The next step is reporting and interpreting data are conducted to provide various insights from respondents to concerning their ability in answering the question in interview.

1.10.4.5 Conclusion process

The last step is process is making a conclusion depend on the research findings. The result of this research need to answer the research questions of the research.

1.11 Research timeline

No	Activities	Month														
		August					Sept				Oct					
		1	2	3	4	5	1	2	3	4	1	2	3	4	5	
1	Preparing research proposal	■	■													
2	Consultation and revision of research proposal			■	■											
3	Asking agreement to the principal of the school for doing survey				■											
4	Choose population and sample					■										
5	Data collection using observation and questionnaires						■	■								
6	Analyzing data from questionnaires								■	■						
7	Making data conclusion										■	■				
8	Finalisation of research												■	■		
9	Thesis examination														■	