

CHAPTER 1

INTRODUCTION

1.1 Background of the Research

Technology in the 21st century has become an important role in high school English learning. Technology is a tool that can be use students as a media in teaching learning process. The use of technology in teaching has become more and more important in recent years. The use of technology is an alternative to be able organize the learning process whenever needed: therefore, with this flexibility, the frequency of learning will increase often so that students can meet adequacy in understanding reading skills (perwitasari, 2017). Language learning in the current era, learning to use manually will be more difficult for students to understand, understand language and understand the structure, meaning and function of language, therefore students will find it more difficult to achieve communication targets (Jahedziah & Razavi & Ghanizadeh, 2015). The tradition of teaching English has improved dramatically with the inclusion of various types of advanced technology (Suhardiana 2019). This study aims to determine the benefits of using technology for learning English reading skills in the 21st century.

The use of technology in the 21st century must be able to meet targets in learning. Therefore the study analyzes the pedagogical benefits of various emerging cellular technologies such as applications in learning English reading skills (Fu ke, 2016). Conceptualization to achieve communication targets in reading skills, technology is conceptualized based on the activity of making videos, chatting with classmates, and computer technology, Internet, chat, blogs, wikis, games, videos, and WeChat is a popular instant messaging application that provides great opportunities and has big advantage in language learning (Karanthi, 2017). Therefore, the process of reading English as a foreign language (EFL) is very complex because it requires the interaction of various factors and the absence or presence of any of these factors can lead to success or failure (Taj

& Ali & Sipra & Et all, 2017) . The success category can be achieved by several factors, namely technology-based learning media that is able to meet learning targets and is in accordance with the analysis of student needs in the 21st century. The problems in this research, in learning reading skill students have difficulty understanding the meaning of text or readings. Moreover, reading is often dominant in learning English. Learning to read will be easier if you use technology. However, many teachers and students have not used technology in learning reading skill.

This research is not only caused by the lack of students interest in learning reading skill using technology, therefore also the lack of understand needs analysis for learning English, and limited knowledge about technology. The limited understanding of the use of technology for learning English, especially in 21st century. In fact, there are many benefits that can be developed from the use of technology even with limited knowledge of technology. This study aims to determine the technology needs of high school students learning reading skills in 21st century. As to the importance of research in technology enhance learning language, some researches show the clusters to explore.

Those are The reading skill in the **language learning** (Fu Ke2016., Taj& Ali & Sipra& Et all, 2017., Ahmadi, 2018., Zou, & Wei, 2018., Ali, F., Sipra, & Ahmad, 2017., Taj& Ali & Sipra& Et all, 2017). **Language learning media and the technology** (Karanthi, 2017., Jahedizadeh & Rajavi & Ghanizadeh, 2015., Ahmad, 2016., Shi & Luo & He, 2017., Tayam, 2017., Santosa, 2017., Jeong, 2018., Abidin& Amaliah, 2018., Acevedo & Gonzales, 2018., Jeong, 2018., Boonyopakorn, 2017., Oz, 2015., Abidin& Amelia, 2018., Monje & Elorza & Riaza, 2017., Nasiri& Azar, 2014., Yang & Shadies, 2020., Haoran& Lee, 2018., Garcia & Elorza& Monje, 2016., Somayeh, F. & Takheshi, 2016., Kessler, & Hubbard, 2017). **Learning Method** (Munggaran, 2018., Abidin, 2017., Yusri, 2016., Mustamid, 2016., Hammad, 2017., Chen & Chen & Dai, 2018., Hsieh & Wu & Marek, 2018., Mahadzir & Phung, 2018., Haj, 2020., Abidin& Amelia, 2018., Ahmad, 2016., & Boynuegri, 2017., Yükseltürk & Altıok & Başer, 2018).

Only a few previous studies have discussed the 21st century. Therefore, several studies must be developed on the role of technology in the 21st century. In the 21st century, learning and technology are inseparable. The use of technology that is common in learning and developing English is in accordance with the needs of technological analysis in the introduction of learning English reading skills. EFL educators and students have been involved in the daily use of multimodal learning materials and educational technologies (Jeong, 2018).

Learning reading skills using technology, the role of technology will greatly assist reading learning in the 21st century. However, from previous studies, very few discussed reading skills learning using technology according to the 21st century, especially for high school. Learning English reading skills through the use of technology is an application in the form of learning media that aims to meet the needs of students and accelerate the achievement of the goals of each activity that will be carried out in the use of technology. The use of technology in language classrooms has several benefits because it can provide language learners with a genuine learning environment and self-motivation (Jeong, 2018).

There is no previous research that discusses learning reading skills in high schools in accordance with the needs analysis in the 21st century. Learning can be done in a number of ways. Changes and technological advances in the past have affected information-related ICT (Monje & Elorza & Riaza, 2017). In addition, after the teacher knows the student's needs, the teacher or lecturer can take advantage of and know the learning targets of the 21st century according to the student needs analysis.

The relation between technology and learning reading skills, technology in relation to the teaching and learning process is an effective and efficient medium and in the teaching and learning process. Therefore, in this case it can be said that technology as a medium plays an important role as an effective and efficient tools in the teaching and learning process.

1.2 Identification of the problem

The identification of this problem paper is determined by how we benefit from it and the issues that exist in the current era. Topics or issues in current research that learning and technology cannot be separated, in the 21st century technology plays an important role in learning. Especially the use of technology for learning reading skills, learning reading skills in the 21st century requires media in the form of technology. Abidin & Amelia (2018) said that the use of media on technology in the learning is effective, beneficial and motivational in English language learning. Based on existing issues, this study will focus on examining special media for learning reading skills in the 21st century era. Learning reading skills will be related to reading text; therefore learning reading skills has several issues including the type of text, the characteristics of the reader, the teaching approach. According to Lee (1998) as cited in Ghazali (2013) text writing factors influence the difficulty level of learning a lot. Given the information about problems in the current era, many teachers and students have not used technology in education, especially in language learning.

1.3 Delimitation of the Problem

Limitations in this research paper the concentration will be focused on the use of educational technology in the learning of English reading skills for high schools in the 21st century. Haj (2020) said that technology is very expensive to use. Technology will be connected to the internet. Some regions do not yet have electricity and the internet, making it very difficult to use educational technology. Therefore, in the 21st century, teachers must have skills in using technology so that they are able to know about how technology works. That way some students will not find it difficult to use this technology even without guidance.

There are limitations in this study; the limitation in this study is that this study is focused on analyzing the needs of students in learning English reading skills for 12th grade high school students using technology in the 21st century. Therefore, this study will discuss the analysis of the needs for learning English reading skills in the 21st century based on technology.

1.4 Research Question

1. How do students learn EFL reading in the 21st century by utilizing technology?
2. What do students need in EFL learning reading skills using technology in the 21st Century?

1.5 Research Objective

1. To identify how to learn to read EFL in the 21st century by utilizing technology.
2. To identify what students need in EFL learning reading skills using technology in the 21st Century

1.6 Research Significance

The significant of the research paper is the influence of technology in the 21st century for learning English. The latest change in communication is with the invention and growth of the Internet. The internet allows almost anyone in any part of the world to communicate with each other quickly and easily. Technology offers powerful learning and teaching tools that demand new skills and understandings both from learners and teachers (Haj, 2020). Considering this information, the researcher expects several advantages from this study because this is going to be important for the community because it's about an area of universal importance. Additionally, it can help provide teachers with academic information about their careers and inform teachers about analyzing learning needs by leveraging technology in the 21st century. Before analyzing learning needs, the teacher must analyze the characteristics of these students in order to find out what learning suits the needs of students in the 21st century by utilizing technology.

A. Theoretically

This research can be useful for further research that is being investigated by other researchers and can use this research. The following researchers will discuss the topics found in this study in more depth according to the context or research topic that will be examined afterwards.

B. Practically

1. For students

This research is useful for students especially in grade 12 high school. This study students can improve reading skills using technology in the 21st century. Then students can understand their learning needs in the 21st century by using technology. Thus reading learning in the 21st century will suit the learning needs of students.

2. For teacher

In addition this research is also useful for high school teachers. The teacher will know what the learning needs of students in the 21st century by using technology, which can then be directly applied to learning according to the needs of the 21st century.

1.7 Literature Review

The use of technology in learning English in the 21st century is very influential, especially in learning reading skills, by using technology students and teacher can take advantages of features that help in learning reading skills according to need analysis. There are three research topics, namely the 21st century, technology and the need for reading skills in the 21st century.

1.1.1 The 21st Century

The 21st century there is a very rapid change covering the fields of economy, transportation, education and others. This very rapid change will be an excellent opportunity, especially in the field of education. This very rapid change has been seen in the field of information technology such as social media. Social media is very rapidly developing in the 21st century; the rapid development in the 21st century has taken advantage of many people in the field of information technology such as making business only through social media or technology. The rapid development of technology in the 21st century is also the greatest opportunity to take advantage of technology in the field of language learning. The 21st century is called the century knowledge-based, economic century knowledge,

information technology, century globalization, industrial revolution 4, 0 and etc (Radhana,2019). 21st century is controlled by information technology network (Nyoto & Sudjimat &Wijaya (2016). In addition to the fundamental skills that must be learned in the 21st century (critical thinking and problem solving innovation and imagination, teamwork and communication). Technical, information and communication literacy must also be mastered. 21st century is the real implication of the development of society from time from time to time in learning.

Learning in the 21st century must be able to prepare the Indonesian generation to accept developments in social life in information and communication technology (Syahputra, 2018). In addition to being able to prepare in the 21st century in the field of technology, it is also challenged, according to Nyoto, Sudjimat, Wijaya (2016), to be able to build education that will participate in the 21st century establish thinker tools capable of participating in the construction of social and economic orders awareness as necessary for the world's people in the 21st century. Education in the 21st century will become increasingly important to maximize students having learning and innovation skills, skills in utilizing technology and information media, and being able to work, and survive using skills. 21st century is determined by the number (1) Information that can be used anywhere and can be accessed at any time; (2) faster computing; (3) automation that eliminates repetitive work; and (4) connectivity from anywhere and anywhere that can be done (Nyoto, sudjimat, Wijaya, 2016).

Whereas according to Syahputra (2018) the 21st century has been simplified into 4 main principles of learning in the 21st century which are explained and developed as follows:

1. Instruction should be student-centered

Students are placed as teach subjects who actively develop their interests and potential. Students are no longer required to listen to and memorize subject matter.

2. Education should be collaborative

Students need to be encouraged to collaborate with friends in their class. They must be taught how to appreciate the strengths and talents of each person.

3. Learning should have context

Teachers need to make subject matter linked to daily life of students. Teacher develops learning methods that allow students to connect with the real world.

4. Schools should be integrated with society

In an effort to prepare students to become responsible citizens, schools should be able to facilitate students to be involved in their social environment. Students can be invited to visit orphanages to train their empathy.

Learning models in the 21st century are learner-centered learning models. Learning models in the 21st century will emphasize more on the scientific approach. Lessons that can develop are critical thinking and problem solving skills, creativity and innovation, collaboration, and communication. All 21st century learning outcomes will be able to be developed during learning only if educators carry out learning with a scientific approach appropriately and correctly, this describes several learning models with a scientific approach that are able to develop 21st century skills (Redhana, 2019). Meanwhile, according to Syahputra (2018) the model of learning characteristics in the 21st century, namely teachers as facilitators, motivators and inspirations, and learning sources not only for teachers, teachers are also not the only source of information. Students must be able to take advantage of learning resources through digital progress. This learning model in the 21st century will be an inspiration for students in the 21st century to be more active in studying. Sudjimat, Wijaya, (2016) Learning in 21st century, it is necessary to identify the competency requirements needed, To face learning in the 21st century, everyone must have critical thinking skills, knowledge and digital literacy skills, information literacy, media literacy and master information and communication technology. In this 21st century, education is becoming increasingly important to ensure that students have the skills to learn and innovate, the skills to use technology and information media, and be able to work, and survive using skills.

1.7.2 Technology

Humans from time to time will essentially carry out activities that are never interrupted, humans will learn during their life. Everyone must learn, therefore in the learning process they need media that can facilitate the learning process. Today technology and learning media are almost inseparable, and the use of technology that is of great interest to many individuals makes technology an important learning medium (Suminar, 2019). According to Priyitno (2013) learning using technology students must be able to master Tools for working, which must be a tool for technology. Mastery of Information and communications technology and information literacy is a must. And Skills for living in the world is the ability to live life in the 21st century, namely: Citizenship, life and career, and personal and social responsibility. In the present era, humans are required to apply technological developments even with all technology-based systems, in the current era, education continues to follow technological developments therefore use of technology as a medium learning is a must in this era now. Prospective educators must know the learning model as for the understanding of the learning system according to Hamalik (2003) as cited in Winasanjaya (2017) the learning system is an organized combination includes the elements human, material, facilities, equipment and procedures interact to achieve a goal. Technology plays a very important role in language learning, students will easily take advantage of technology to increase their creativity and ability in language learning. However, according to Seminar (2018) the lack of learning experience, on the other hand, technology can provide costs and time, lack of a must equipped with the teacher, the teacher can collaborate with others on media technology so that students can feel the learning experience, but keep it cost-effective and time-effective. The use of technology to have advantages and disadvantages is wrong one disadvantage.

Technology is tools that used as a learning medium in language learning, not without reason, technology itself has its own advantages, the advantages of technology being used as a medium for language learning are: Learning English in Senior High Schools (SMA) especially in grade 9, the use of media in learning English in SMA is able to make students do more learning activities, and other

activities such as observing, doing, demonstrating, and so on. One of the objectives of learning English in Middle Schools is to train students to be able to communicate orally and in writing. And communicate, understand and express information, thoughts, feelings, and develop science, technology and culture. With this, technology plays an important role in language learning in senior high schools, especially in grade 9. According to Miarso (2004) argues that "Media learning is anything that is used to convey messages and can stimulate thoughts, feelings, attention, and the willingness to learn so as to encourage the learning process ". It can therefore be inferred that the media are all actual instruments that can also present messages. To spare students to read, such as movies, books, and recordings. In order to facilitate the teaching and learning environment, the layout of the learning media must be as close as possible. Activities in teaching and learning are a method. Components of teaching and learning programs. in this research the technology that will be used is as follows:

1.7.2.1 Application

Application is a software program that is used for specific purposes. An application is also software unit created to serve the needs of the community for several activities such as commercial systems, community service games, advertising, education or all processes that are almost needed by humans. According to Aini & Riyantomo (2019) in learning English using an application, learning will be fun and to determine the feasibility of an Android-based learning application as a learning medium. Meanwhile, according to Aisa & Akhriyana (2019), an application is an application that can run on mobile phones and can be used as a medium for learning, processing and obtaining practical information. Moreover, Wibowo (2020) as a support for learning English by using applications makes it easy for cadets to improve their English skills and provides benefits in learning English.

The role of information technology for the world of student and teacher education is easy to find learning resources even with the application students have learning media that can be used at school and outside of school. In the

application there are various features such as Learning Resources, Digital Classrooms, Electronic School Books, Cultural Maps, Language and Literature Works, and other features that can be used by teachers and students for free.

1.7.2.2 You Tube

In the era of globalization, English has become the main key in order to be able to compete in the international world. Seeing the importance of English, people are increasingly studying it as well as in the world of education. Some people study at certain courses or academies, some can learn independently by using online platforms such as YouTube. English learning videos on YouTube can be accessed for free anytime and anywhere, including at home. In the world of education, especially in high school, it will not be separated from learning reading skills, because reading is one of the skills in English. Channel created by one of the world's leading broadcast companies, The British Broadcasting Corporation provides videos for English learners. With a short duration, the videos available contain conversations, interviews, or short cartoons. It's easy and doesn't take long.

1.7.2.3 DVD

DVD is a hardware-based technology. DVD is one of the learning media that can be used in learning Reading Skills. In addition, the images and sound produced will make you interested in paying attention to the material contained in the audio-visual DVD. According to Aswara (2019) DVD is one of the learning media that can support students to master learning materials. However, according Sulistiawati (2019) DVD is a teaching material which is a combination of two or more media (audio, text, graphics, animated images, and video). In addition, DVD is an effective audio-visual media to convey certain messages so that it is effective in learning reading skills with the aloud reading method (Sujarwo & Sulistiawati, 2016). from the expert opinion above that DVD can be used in Reading Skills learning because it has various features such as images, sounds and movements so that students can easily use Reading Skills in learning. Especially Aloud Reading,

in this learning DVD can be used as a medium for reading aloud reading. By listening to the video the teacher reads then the students repeat what the teacher reads late. It can be used in online learning. Learning to silent reading and Aloud Reading with use movie with help Audio-Visual media via computer helps students enthusiastically observe and what is shown (Anggraeni, 2018).

1.7.3 Reading skills

Reading is one of the skills in learning English. Reading skill is the most important activity in learning reading. According to Nur & Ahmad (2017) conducted a study that: apart from speaking skills, reading skills play an important role in learning English. Therefore the teacher can help students improve their reading skills to practice reading by utilizing technology as a learning medium that can help students practice reading, such as utilizing learning applications. Technology helps make it easier for learning English, especially reading text, is able to combine several media, including: text, graphics, audio, video, and animation, to become a computer program application (Budiman, 2018). According to Budiman (2018) in his research that the use of technology through film players can be used by English teachers to deliver reading skills material. Whereas according to Fridolini & Pratama (2020) the research conducted is that use of media as one of the technological innovation solutions new in the teaching process reading and can considered a new way to support the upgrade process student interest in reading. The 21st century skills that are indispensable for graduates to excel and compete in the 21st century have been identified by The Partnership for 21st Century Skills (2008). These skills can increase the ability to sell (*marketability*), ability to work (*employability*), and readiness to be a good citizen (*readiness for citizenship*).

1.7.3.1 Skimming

Skimming is one of the skills in reading. According to Aritonang & Lasmana & Kurnia (2018) this skill means that every read they do not have to read every word and line. In skimming technique students or readers only read a

few parts. According to Yusuf & Yusuf & Yusuf & Nadya (2017) Skimming technique allows readers to only read the main idea. Speed reading is reading the entire material quickly (Rakhmanita (2019) Therefore, according to Abdelrahman & Bsharah (2014) how to increase reading speed, readers must also increase their concentration. According to Abdelrahman & Bsharah (2014) there are three ways to learn to use skimming techniques, namely 1) reading the first sentence 2) reading the last sentence 3) reading keywords. With these three ways, readers will easily find the main idea more quickly. From the expert opinion above, it can be concluded that skimming is a high-speed reading skill so that you can find out the main idea quickly.

1.7.3.2 Scanning

Scanning is not like skimming because the reader does not focus on the main idea. . Scanning comes from the English word "scan" which means skimming. And scanning is a skimming technique. According to Agunawan (2010) cited in Rakhmanita (2019) scanning is a skimming, but thorough reading skill that can derive meaning and information from a passage. In addition according to Nabilah (2017) scanning is a skill to read in a glance but carefully. According to Yusuf & Yusuf & Yusuf & Nadya (2017) scanning techniques usually readers only look for certain information such as date, name, place and so on. According to Brown (2003) scanning is the process of reading certain parts quickly in a text. In reading by using scanning skills, it can help students in making it easier to read the text. More than that, scanning can improve student learning outcomes in reading.

1.7.3.3 Selecting

Selecting is a reading skill by scanning text and parts of the text based on the needs of the reader. Selecting' or also known as the read-select technique. This type of reading technique is quite considered to prioritize needs, which means choosing the text and parts to be read based on needs. This technique is usually done before reading activities, for example when reading news headlines in

newspapers. According to Nabilah (2017) selecting is a reading skill only in parts that contain the required information. according to Aris (2016) is to find the reading passage that relevant to the needs of the reader, carried out by skipping/over passing unneeded parts of the content. Selecting is a reading skill by selecting text from the required section; usually this technique is done before reading activities, for example when reading the titles of books in newspapers.

From the expert explanation above, it can be concluded that Selecting is choosing the text and parts of the text that are read based on needs. This technique is carried out before reading activities, for example when reading news headlines in newspapers

1.7.3.4 Skipping

Skipping is a reading technique by jumping (Rahmat, 2010). In addition according to Rakhmanita (2019) skipping is a reading skill by jumping. According to Nabilah (2017) skipping is a reading technique by leaping, meaning that parts that are deemed not in accordance with the needs are ignored. From the expert opinion above, skipping is a reading activity that ignores and skips parts that are not important and are considered unnecessary. Skipping is also a reading technique in finding only the relevant parts.

1.7.4 Definition of Reading

Reading is a thought process complex or intricate, involving many things not just written or spoken as well involves attitudes, thoughts and experiences to focus on each reading. Reading can also be called an activity to understand the reading text with the aim of understanding the text and obtaining information from the reading of the text. Reading is a passive skill that requires a process of understanding meaning to get information or ideas from written texts (Nur & Ahmad, 2017). According to Herlina (2016) the visual reading process is a process that translates written symbols (letters) into spoken words, as a thought process, reading involves literal word recognition and understanding activities, interpretation, critical reading and creative understanding, word recognition can

be an activity using a dictionary to read words. According to Ghazali (2013) reading can be viewed as a decoding or bottom up process of written symbols, because reading begins with understanding the smallest segment segments (letters, syllables, words).

1.7.4.2 Intensive Reading

There are several types of reading, namely intensive reading, extensive reading, aloud reading, silent reading (Patel & Jain, 2008). Intensive reading is read with short readings and with clear goals (Khazaal, 2019). However, according to Marunung & Pardede & Purba (2020) intensive reading is reading books serious, periodical, and other libraries. Intensive reading is text reading or passage reading. In this reading the learner read the text to get knowledge or analysis. The goal of this reading is to read shorter text. This reading is done to carry out to get specific information. Learner reads a book to acquire knowledge is the kind of intensive reading. Intensive reading is reading the text or parts of the text. In this reading activity students read a text to gain knowledge or analysis. The purpose of this reading activity is to read short texts. This reading activity. intensive reading is done by looking for specific information. In essence, students read in order to gain knowledge.

Intensive reading will provide a basis for explaining difficulties of structure and for extending knowledge of vocabulary and idioms. It will also provide material for developing greater control of the language in speech and writing. Intensive reading provides a basis for explaining language difficulties and developing knowledge of vocabulary and idioms. This reading activity also provides material for developing greater mastery of speaking and writing skills.

1.7.4.3. Extensive Reading

Material for extensive reading will be selected at a lower level of difficulty than that for intensive reading. Extensive reading is reading widely and in large quantities (Muchtar, 2019). In addition, according to Marunung & Pardede &

Purba (2020) extensive reading is to enjoy reading and the main goal is to relax and enjoy reading, such as story books, fairy tales and other. The purpose of extensive reading will be to train the student to read directly and fluently in the target language for enjoyment, without the aid of the teacher. Extensive reading material can be selected at the lowest difficulty level of intensive reading. The purpose of this extensive reading is to train students to read directly and fluently in the target language for pleasure, without the help of the teacher.

1.7.4.4. Aloud Reading

Reading aloud also plays an important role in teaching of English. Teacher should know that the training of reading aloud must be given at primary level because it is the base of words pronunciation. Aloud reading is reading aloud strategies enable students to understand high level language (Sajid & Kassim & Hasan, 2019). According to Mahartika & Dewantoro, (2017) cited in Sya'bana & Azizah & Wijayanti (2021) reading aloud is a reading activity by raising the voice that students attention can focus. According to Nuraeti & Aryanto & Gumala (2019) reading aloud is the activity of teacher or students reading stories and other students are listening. However Reading aloud or also reading aloud has a very important role in the world of teaching English. The teacher must know that teaching reading aloud must be given at the main level because this type of reading activity is the basis for pronouncing words.

1.7.4.5. Silent Reading

Silent reading is a very important skill in teaching of English. This reading should be employed to increase reading ability among learners. Silent reading is done to acquire a lot of information. However, accordin Marunung & Pardede & Purba (2020) silent reading does not mean reading without a sound, saying the words in this mind. Teacher has to make them read silently as and when they are able to read without any difficulties. Silent reading is a very important skill in teaching English. This reading activity should be used to improve students'

reading skills. Silent reading is done to get a lot of information. The teacher must make students read quietly so that students can read without any obstacles.

1.8 Previous Research

Several authors have examined research on the use of technology for learning in the 21st century according to needs analysis. Based on research Nyoto & Sudjimat & Wijaya, (2016) Learning in 21st century, it is necessary to identify the competency requirements needed. To face learning in the 21st century, everyone must have critical thinking skills, knowledge and digital literacy skills, information literacy, media literacy and master information and communication technology. In this 21st century, education is becoming increasingly important to ensure that students have the skills to learn and innovate, the skills to use technology and information media, and be able to work, and survive using skills.

The 21st century is known as the knowledge age, in this era, all alternative efforts to meet the needs of life in various contexts are more knowledge-based. Meanwhile, according to Suparti (2018) basically, learning English must have speaking skills, Listening skills, reading skills and writing skills. These four abilities are very important to learn. Needs analysis is the first stage in the process of developing student skills. Needs analysis is often used to solve problems regarding learning targets so that it will produce effective educators in accordance with needs analysis. Based on this research, there are three clusters, including language learning, language learning media and technology and the last one is learning methods.

1. Language learning

Language learning is a conscious process of sharpening skills, for example deepening learning grammar. Learning reading is especially important if you want to improve your way of writing and understand more complex language structures. According to Jeong (2018) fostering communicative competence in English as a foreign language through the use of language learning, assisted multimedia and also to examine the effect of using native multimedia-assisted

language learning resources and effective learning strategies. In the language learning cluster, it discusses how language teaching is carried out based on a language teaching approach that emphasizes interaction as a means and ultimate goal of language learning.

2. Language learning media and technology.

The success of learning through m-learning depends to a certain degree on the behavioural intentions of students and teachers, awareness and perceptual attitudes about mobile language learning. Research on their perceptions and positive attitudes is the key to understanding whether they will accept and use technology in learning. Improve students' English skills using technology-based application, the features and advantages of application have been discussed, and a technology model using application has been designed (Shi & Luo & He, 2017). An empirical study has been conducted to show that the MALL model is beneficial for learning English.

3. Learning Method

Based on clusters in this study is to discuss language learning methods by utilizing technology. In these clusters with the assumption that technology enhancing methods to provide valuable assistance in clarifying students in learning. As mobile technologies have evolved, so have their advanced applications developed for language education (Abidin, 2017). The use of methods in learning is one of assisting teachers in classroom management problems; this is related to technology-based learning methods by utilizing applications so as to broaden the teacher's insight regarding learning techniques. The research cluster explains that technology-based learning methods are able to foster student interest and motivation in learning activities, and create conducive classroom atmosphere that supports the success of teaching and learning activities.

The real gap in previous studies discussed with my current study is that there is no explanation regarding the analysis of learning needs both in language learning, language learning media and technology; even about methods. The position of this research study is compared to previous studies in cluster language

learning, learning media, technology and methods. In previous research, it only focused on its context, whereas this study included the three clusters in one study and also discussed the analysis of student needs in learning languages using technology in the 21st century.

1.9 Frame of Thought

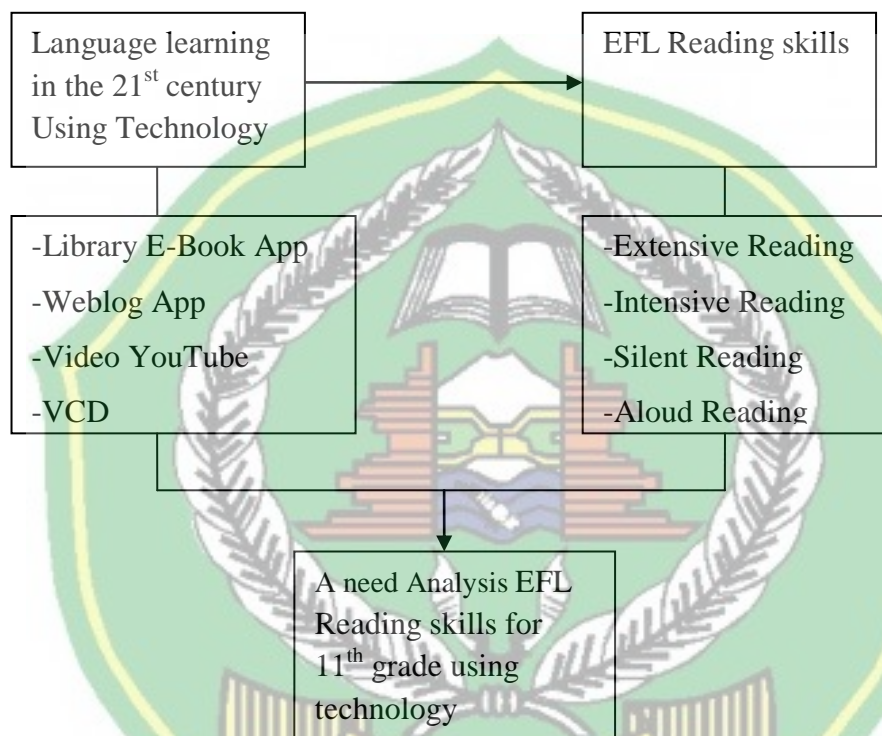


Figure 1.1 Research of Learning in the 21st Century and need analysis in EFL Reading skill in the 21st century

In the 21st century technology is developing very rapidly, therefore, technology can be used in Learning Reading Skills. This case will discuss what technology is used in learning Reading Skills. In learning Reading there are several skills, include intensive reading, extensive reading, aloud reading, and silent reading. and thentechnology in learning reading skills includes the Library E-Book App, Weblog App, YouTube videos, and read aloud videos using DVDs. then analyze the needs of students in using the technology. Each technology has

different needs therefore that from the analysis of these needs students can use technology in learning Reading Skills.

1.10 Research Method

1.10.1 Research design and steps of the research

The method of research is qualitative research, which is research designed in a way that helps reveal the behaviour and perceptions of the target audience by referring to certain topics. And research where the object of research is explored through various types of qualitative research methods such as interviews. Qualitative research is a type of research in which researchers are very dependent on information from the object or participant on: a broad scope, general questions, data collection which mostly consists of words and texts from participants (Creswell, 2008). Lincoln & Guba (1985) as cited in Tylor (2016) Qualitative researchers are concerned with how people think and act in their everyday lives.

There are several opinions in detailing the stages of qualitative activities, as Creswell(2008) in his book Research Design; Qualitative and Quantitative Approaches, states that stages or procedures in a qualitative approach include steps as follows;

1. The Assumptions of qualitative Designs
2. The Type of Design
3. The Researcher's Role
4. The Data Collection Procedures
5. Data Recording Procedures
6. Data Analysis Procedures
7. Verification Steps
8. The Qualitative Narrative.

Stage 1

Technology in 21st century will be influential in language learning education, especially reading. Rapid development will be an opportunity for the world of education in the 21st century. Technology that is developing rapidly in

the 21st century must be utilized optimally, especially in the world of literacy, and this is related to language learning, especially reading skills. Children who grow up in the digital era cannot just be separated from gadgets. Judging from the habits of Indonesian people who like to play gadgets every day, this can be one of the potentials to improve reading learning (Nyoto, sudjimat, Wijaya, 2016). An effective way by utilizing technology in the use of interactive learning media based on android applications. Interactive learning media are multimedia-based tools that aim to simplify and support the learning process of reading skills. In the 21st century, technology will be influential in language learning education, especially reading. Rapid development will be an opportunity for the world of education in the 21st century.

Technology that is developing rapidly in the 21st century must be utilized optimally, especially in the world of literacy, and this is related to language learning, especially reading skills. Children who grow up in the digital era cannot just be separated from gadgets. Judging from the habits of Indonesian people who like to play gadgets every day, this can be one of the potentials to improve reading learning. An effective way by utilizing technology in the use of interactive learning media based on android applications (Suparti, 2018). Interactive learning media are multimedia-based tools that aim to simplify and support the learning process of reading skills. The topic of this research is the 21st century, and the focus of this research is learning reading in the 21st century by utilizing technology.

Learning to read using technology in the 21st century according to Rahmatin &Sujana (2019) using digital literacy is very important to be used during learning and to be applied when carrying out learning at home. To be able to use technology for learning, students and teachers need to have the ability to apply technology. According to Syahputra (2018) learning in schools in Indonesia requires that all education stage holders must master ICT literacy skills, teachers, students, even parents must be literate in technology and communication media, be able to communicate effectively, think critically, can solve problems and can collaborate.

In this research method also uses critical review, because it can see the source of the review literary in books, journals, etc. Critical literary review is a process that employs a structured design for analysis (Nashrudin & Mustaqimah, 2020). The Purpose of a Critical Review Critical Review is a writing assignment that requires you to summarize and evaluate the writing in research Jesson, & Lacey (2006) as cited in Nashrudin & Mustaqimah(2020) Reviews of critical literature include up-to-date opinions in their subject areas from key scholars, explain current conceptual understanding, analyze previous work's strengths and limitations, and encourage others to follow up on the work you cite, using accurate and comprehensive references. Writing a literature review is a complex process in which the various sections of the review relate to each other and educate each other (Nashrudin & Mustaqimah, 2020).

Stage 2

The topic of this research is needs analysis. The need for the use of technology in language learning in the 21st century, teachers and students take advantage of technological developments in learning. Especially reading skills, learning reading skills using technology is very effective to hone reading skills. The focus of this research is to analyze the needs of learning to read using technology in the 21st century. Analysis of learning needs in the 21st century by utilizing technological literacy, android applications, even most importantly being able to apply technology. From the results of the critical review, students need an introduction to technology by, for example, seminars on the use of technology. After that students take advantage of technology through android applications related to language learning.

a. Selecting the participants

The technique of selecting participants in this study used probability sampling techniques, with simple random sampling. To be selecting the participant which include characteristics and knowledge of the research issue.

b. predictable questions

Random sampling technique is a random technique to be used as a sample. The questions that might arise in this research are whether language learning has ever used technology, does technology play a role in language learning the focus of this research is the analysis of learning needs using technology in the 21st century, therefore the questions that will arise in this study are those concerned with the focus of the research.

c. Collecting data

Collect data in this research by means of interviews. Interviewing is the form of data collection most often used in qualitative research. Research interviews are more than just conversational and range from informal to formal. Although all conversations have certain rules of transition or control by one or another participant, the rules for research interviews are more stringent. Unlike in casual conversation, research interview is aimed to get information from one side only; by therefore an asymmetrical relationship must appear. Researcher ends to direct the interview toward discovery the participants' feelings, perceptions, and thoughts. The following descriptions will describe the type interview, type of question, length of interview time, and the procedure for conducting interviews in research qualitative. An explanation of data collection is an important thing because it will guide the reader understands the research process properly.

d. Analyze data

The data in this study were obtained using various data collection techniques (interviews, questionnaires, video / audio recordings, data etc.). Analysis based on the data obtained, then developed into hypotheses. Based on the hypothesis formulated from the data, then more data is searched repeatedly so that it can be concluded whether the hypothesis can be accepted or rejected based on the collected data.

1.10.2 Source and type of data

Stage 1

Resources	Web address
Search Engine	
Google	http://www.google.com
Google Scholar	http://www.scholar.google.com
International electronic source of data base	
ERIC	https://www.eric.ed.gov
Taylor & Francis	https://www.tandfonline.com/
Research Gate	https://www.researchgate.net/
Academia	https://www.academia.edu
SAGE Knowledge	https://sk.sagepub.com
Indonesia electronic source of data base	
Perpustakaan Nasional (Perpusnas)	http://e-resources.perpusnas.go.id

Table 1.1: electronic database and search engine for literature collection

Sources of data from the study of learning methods for reading using technology in the 21st century used critical review sources, namely journals, books, such as Google, PDF Drive etc. The data source is taken from the opinion of previous research which is really chosen according to the research context.

Stage 2

The data is a result, the important tools in the Studies in the type of phenomena in the environment. The researcher will know the outcome of the research from the results. Collecting the data must be relevant with the problem of research. The data in this research will be in the form of qualitative data and use qualitative data interview for the data analysis. This research was obtained from data from interviews with participants (about the use of teaching for learning

English reading skills in the 21st century: need analysis and solutions to overcome these difficulties). The source of data is the research topic from which the data can be collected. The key thing in conducting research is data sources. Therefore the data source is the material where the researcher can obtain the necessary information. The success in data collection is largely determined by the researcher's ability to appreciate the social situation that is the focus of the research (Yusuf, 2014).

Type of data and the data used in this research is qualitative research, because qualitative research is qualitative data, namely data that is presented in the form of verbal words not in numbers. Qualitative methods treat the participants as true subjects and not objects. This is where the participants find themselves valuable, because of their information very beneficial. This research method provides space which is huge to the participants. They were spared objectification by researchers who only answered questions that have been prepared and choose the answers already available (Raco, 2010).

1.10.3 Data collection techniques and instruments

Stage 1

Inclusion	Exclusion
a) Should be published between 2016 and 2021. b) Teaching practice in CALL research: Indonesia c) Should involve learning and teaching practice towards CALL. d) Journal indexed nationally or internationally e) CALL research in English language learning	a. Journal which not involve a learning and teaching process toward CALL b. Not indexed nationally (SINTA, IPI) or internationally (Scopus) c. General CALL research (not English language learning)

Table 1.2 an example of literature selection

The data collection is taken from a predetermined source to get data. Lavarakas (2008) Cited in Nashrudin & Mustaqimah(2020) describes initial screening as an initial process in which elements are evaluated to determine whether they qualify for research. Inclusion refers to something in papers that may happen. Exclusion, on the opposite, refers to the item that is beyond the journal's content. In other words, the criterion for inclusion and exclusion should be fulfilled by articles, papers and books that will be critically evaluated.

Stage 2

In collecting all the data, the researcher chose two tools, namely document the learning outcomes of students' reading skills using technology and interviews. Documentation is investigation, gathering, monitoring, Preservation, preparation, use and supply of documents, with a view to the preservation, preparation, use and supply of documents In this case, obtain descriptions, enlightened knowledge and evidence, Usefulness of archives and libraries included. Documentation extends to details regarding the study data. It is intended to make your knowledge comprehensible to others, but also to your future self, who may want to reuse it. Sugiyono (2008) stated that in qualitative research, the instrument is the researcher themselves. Hence, the researcher should be validated by themselves about their ability in conducting research. Data is that has been gathered through the conduct of research. The researcher has to do some techniques to collect those data in order to get the reliable data. Data collection methodology is an important step in research, because the objective of the study is to obtain the data.

There are five data collecting technique. Those are interview, questionnaire. In this research, the researcher uses questionnaire and interview.

i. Interview

An interview is a conversation with a specific purpose that is with a specific purpose that is carried out two parties, namely the interviewer who ask the question and the interview who gave the answer to question experiences and behaviours as well as feeling, namely question that are relates to what a person has done, as well question aimed at understanding a person's emotional respondent. For interview deep conversation to deep experience other people and

the meaning on the experience in collecting data through this interview technique, researchers determined the stage namely:

1. Determining the informants to be interviewed, the researcher determines the stage, namely determining the informants to be interviewed by establishing the lattice instrument and interview guidelines.
2. Hold negotiations with informants, conduct interviews with familiar informants.
3. Copying interview result with interview transcripts. In this case researcher conducted interviews with principals or teacher at school.

ii. Questionnaires

Questionnaires are a process of contact or interaction between researchers and informants or study subjects to gather information by means of questions and answers. There are a number of stages that must be passed in order for the interview to be effective, namely: 1). Presenting myself, 2). Explain the arrival goal, 3). Explain the content for the interview, and 4). Question to Ask (Yunus, 2010).

1.10.4 Data analysis technique

Data analysis is a series of data processing activities includes review, grouping, systematization, interpretation and verification data so that a phenomenon has social, phenomena and scientific values. Data analysis is a series of data processing activities includes review, grouping, systematization, interpretation and verification data so that a phenomenon has social, phenomena and scientific values. (Creswell 2015) there are 6 steps in the process of analyzing data.

1. Categorizing data;

Classifying data according to types and sources.

2. The second step is to reading and analyzing the data.

The data that is already the data is then analyzed. With this step the writer will understand the results of the data obtained

3. Coding.

Coding is the process of segmenting and including text labels to form broad themes in the data. Coding is giving identity to edited data therefore that it has a certain meaning when analyzed later.

4. Analyzing data is a description

This is important done and the author will also analyze data from all sources for build a portrait of an event (Creswell, 2015)

5. Providing a theme.

According to Creswell (2015: 493) themes are similar to code, but are intended to form the main idea in the database, so they form a core element in data analysis.

6. Represents the findings.

According to (Creswell,2015) representing the findings describes several findings in the form of tables and figures and compile a narrative to explain what has been found in response to these writing questions.

1.10.5 Research timeline

To finish this research, the researcher allocated 3 months to do this research.

No	Activities	Months											
		February				March				Oktober			
		1	2	3	4	1	2	3	4	1	2	3	4
1	Developing research proposal												
2	Instrument development												
3	Data collection												
4	Data analysis												
5	Describing data analysis												
6	Revision												

Table 1.3 researcher accocated to this research.