CHAPTER I
INTRODUCTION

This chapter provides the foundations related to this research. it consists of research background, identification of issues, the focus of research, research questions, the aims of the research, the significances of the research, previous studies, the frame of thought, theoretical foundation, and research method.

1.1 Background of the Research

Technology and language are two aspects that cannot be separated from human life in which individuals in their daily lives often deal with technology and language. Technology and language have the same purpose. The purpose is through communication to bring society to a greater civilization. One of the developments in technology can be seen from the many inventions of electronics equipment, such as smartphones as mobile devices that are supported by internet services and almost inseparable from the lives of advanced people in carrying out their daily activities. Smartphones and other mobile devices are no longer foreign to society now. (Yuliawati, 2018, p. 60)

In this smartphone era which is everything is mobile; the concept of learning has been developed into MALL (Mobile Assisted Language Learning). MALL is one of the teaching media that can be used in learning English. It means that one of the successful English media methods (Gholami & Azami, 2012, p. 1). MALL is related to the use of mobile technology in language learning where students do not need to stay in the class or in front of their computers to learn languages (Nezarat & Mosavi Miangah, 2012). Therefore, MALL allows motivated users to learn English independently whenever and wherever (Barakati, 2013).

There are so many technologies that can be used to learners but it is not always can be used for blind learners. Blind learners also have significant problems gaining learning opportunities because of discrimination in education based on sex, race, or disability. Whereas, as stated in Pembukaan UUD 1945,

education is a right for everyone. Therefore, they also had the same opportunities as the other normal learners.

Some clusters related to EFL Learning Media for Blind learners, such as Virtual environment for teaching English to Blind Learners (Chuah, Deli, Chen, 2018), Teaching media to blind learners in learning EFL (Fansury, Lutfin, Arsyad, 2019, Sab ljak, 2016), Future TELL model (Zou, Xie, Wang, 2018), investigating the effectiveness of TELL (Somayeh, Takeshi, Ali, Sipra, Ahmad, 2017, Fathali, Okada, 2018, Li, Lally, Odena, 2019), Gamified Language Learning Platform (Jueru, Ferrao, Vitoria, Ferrao, 2020), Mobile-Assisted Seamless Chinese Learning Questionnaire (MSCLQ) (Chai, Wong, & King, 2016), and TELL using creative modules based on internet and smartphone (Gudala, Reddy, & Dwivedi, 2019).

The research clusters above are existing studies to know the clusters that have not been researched to make new research, to solve the problem in the new research. The researcher has shown different findings. The fact that technology-enhanced language learning has been developed into several new models can help learners to learn more effectively. Previous researches cannot mention the specific skills of the 21st century. However, the focus of this research is not directly on the learner's needs. The focus of this research is to analyze the need for technology for blind learners. By analyzing the need for technology for blind learners, the researcher hopes that this research helps them to learn better and can compete with normal learners in this 21st century.

Previous studies are incomplete because they do not explain learning and skills in the 21st century. From some clusters mentioned above, none of them explain in detail English language skills in the 21st century. The first cluster is "Virtual environment for teaching English vocabulary to Blind Learners" (Chuah, Deli, Chen, 2018). The cluster did not discuss learning in the 21st century and the skills needed in the 21st century, the skills discussed were too specific (vocabulary), and did not discuss need analysis.

The second cluster is "teaching media to blind learners in EFL learning" (Fansury, Lutfin, Arsyad, 2019, Sabljak, 2016). This cluster discusses English

learning media as a foreign language for blind learners. The weakness of this cluster is that it does not discuss the 21st century, the skills needed in the 21st century, and it does not discuss need analysis.

The next clusters are "Future TELL model" (Zou, Xie, Wang, 2018), Investigating the effectiveness of TELL (Somayeh, Takeshi, Ali, Sipra, Ahmad, 2017, Fathali, Okada, 2018, Li, Lally, Odena, 2019), Gamified Language Learning Platform (Jueru, Ferrao, Vitoria, Ferrao, 2020), Mobile-Assisted Seamless Chinese Learning Questionnaire (MSCLQ) (Chai, Wong, & King, 2016), and TELL using creative modules based on internet and smartphone (Gudala, Reddy, & Dwivedi, 2019). In these, it discusses technology-based English learning in the future. The weakness in these cluster is that these cluster does not specifically discuss blind learners and need analysis about media for blind learners.

Blind learners usually learn to read and write more slowly than learners who can see. However, blind learners have to learn in other sensory ways: feel the touch, smell, and listen. (Fansuri, Lutfin, Arsyad, 2019). Therefore, we need technology that can help facilitate them in learning English in the 21st century.

1.2 Identification of the Issue

The identification of the issue is required to clarify the research which is investigated. As mentioned before, blind learners are different from normal learners because they have not to use their eyes to learn. The result of previous research showed that the use of modern technology is very important to improve the quality of learning especially in the 21st century. Blind learners need special media that can help them to learn English as a foreign language. Due to their limited senses, it is difficult for them to follow learning like normal learners. In recent times there are a lot of media that can be used to support the learning process, such as handphones, computers, and laptops. Many learning applications are widely circulated to support student learning in the 21st century because the 21st century requires students to keep up with the times by being able to operate existing technology. Therefore, researcher raised this issue to be able to find the needs of media that could help blind learners follow English learning effectively.

1.3 Limitation and Focus of the Research

The researcher arranges the limitations of the research as follows. The field of this research is Technology Enhanced Language Learning. The research field is English as Foreign Language (EFL) media. The subject of this research is blind learners of senior high school, parents, and teachers. The research place of this research is SLB Beringin Bhakti Kabupaten Cirebon.

There are some reasons why the researcher chooses blind learners from senior high school because at the high school level there are many learning media that can be applied in the classroom. The variety of media given is the reason why the researcher chooses the senior high school as the object of this research. To complete the data of this research, the researcher also takes the data from parents and teachers because their roles cannot be separated from the blind learners, which means that parents and teachers know what blind learners need. The researcher conduct observation, and interviews to collect the data.

1.4 Research Questions

Based on the background of the research, the following questions are formulated to guide this research:

1) What are the EFL learning media for blind learners?
2) What are the needs of EFL learning media for blind learners in the 21st Century?

1.5 Aims of the Research

This research is specifically aimed:

1) To describe the EFL learning media for blind learners
2) To describe the needs of EFL learning media for blind learners in the 21st Century.

1.6 Significance of the Research

This sub-chapter the researcher hopes that the result of this research will be useful both theoretically and practically.

Theoretically, this research will be useful for teaching matters especially at teaching English as a foreign language, increase educational quality and give a theoretical contribution in educational worlds especially that related to the needs of media to support teaching and learning English as a foreign language for blind learners.

Practically, this research will be useful for the readers, colleague or public societies to more understand about the need of media to support teaching-learning English as a foreign language for blind learners, give knowledge to blind learners of how important to use media in the process of learning English as a foreign language and make them able to think creatively and innovatively, and as the references for the next research about media to support teaching and learning English as a foreign language for blind learners.

1.7 Theoretical Foundation

This sub-chapter discusses some foundation theories that support this research about the needs of EFL learning media for blind learners. The purpose of this subchapter is to verify all of the supporting theories used in this research: 21st Century Skills, Education in the 21st century, Blind Learners, Technology Enhanced Language Learning, Mobile Assisted Language Learning, EFL learning Media for blind learners, and Need Analysis.

1.7.1 21st Century Skills

The 21st century can be said to be the age of knowledge - a century marked by a massive transformation from an agrarian society to an industrial society and continuing to a knowledgeable society (Soh, Arsyad & Osman, 2010). This transformation process is also marked by the occurrence of a set of social and cultural changes due to the emergence of globalization and the rapid flow of information.

Since the advent of optical cable technology and web browsers, the flow of information around the world has become increasingly out of control and has resulted in what is known as the "digital information explosion" (Halpern, 2003). According to the data released by IBM (2014)

shows that the world today produces around 2.5 quintillion data in the form of files, print, and digital media. Furthermore, Lau (2011) stated that peoples can easily quite literally at the fingertips via the internet with only a few minutes of search time on the computer with a view click of a mouse.

Through a search engine, one can easily find the reference material he wants in "real-time" at a very low cost. All of that is possible because the teaching materials and the interaction process have been successfully "digitized" by advances in technology. Friedman (2007) describes this change as "the world is flat" - referring to a condition where the world has been freed from the boundaries of distance and time due to technological developments.

In the tight uncertainty and challenges faced by everyone, a paradigm shift is needed in the education system which must be able to provide a set of 21st-century skills needed by students to face every aspect of global life (Soh, Arsad & Osman, 2010).

1.7.2   Education in the 21st Century

It cannot be denied that the basic idea of education is to develop human beings so that they can survive protecting themselves from nature and regulating human relations, especially when education is faced with an era where everyone has to compete in various sectors of life in the 21st century. The 21st century must always be adaptive to changing times. An adaptive education system means the need for synergy between the design of the education process and the development of the latest knowledge to make us aware of the importance of the demand for "creation" of superior human resources, so the education system and model must also transform. (Trilling & Fadel, 2009)

Three key areas of knowledge are composed of 21st-century skills: (1) creative thinking; (2) information, media, and ICT (information, communication, and technology) skills (collectively referred to as digital

literacy); and (3) life and job skills competencies (p. 8). It consists of eleven competencies which are classified into three gist elements including (1) learning and innovation skills, (2) information, media, and technology skills, and (3) life and career skills (P21 as cited in Chu 2017, p. 3).

Chu (2017) explained the first skill for learning and innovation which include communication and capacity for thinking. The second shared set of skills stresses the importance of mastering information technology (IT) skills, which include both standard IT skills, such as keyboarding, web browsing, word processing, and information literacy (IL) skills, including some more sophisticated usage of information, such as properly and ethically scanning, reviewing and citing information contained on the web. The third ability focuses on the ethical side of citizenship, requiring individuals to take responsibility for the environment, both personally, nationally, and internationally. All of the three tested systems were found to accept similar sets of skills and competencies at some length (p. 20-21).

1.7.3 Blind Learners

This sub-chapter discusses about the nature of blind learners, characteristics of blind learners, and learning methods for blind learners.

1.7.3.1 The Nature of Blind Learners

According to Kamus Besar Bahasa Indonesia, Blind people can be defined as a person which is not being able to see. According the Indonesian Blind Association or Pertuni (2004) defines blindness as follows:

> *"Blind people are those who have no vision at all (total blindness) to those who still have a residual vision but are unable to use their eyesight to read plain text measuring twelve points in normal light even though they are assisted by glasses (less alert)."*

This means that blind people may have no vision at all even if they only distinguish between light and dark.

According to Somantri (2006, p. 65) blind people are individuals whose senses of sight (both) do not function as channels for receiving information in activities like a watchful person. Smart (2012, p. 36) also stated that blind is a term for individuals who experience disturbances in their sense of sight.

Blindness is divided into two types. The first is totally blind. People with this vision condition are called as *totally blind*. On the other hand, there are blind people who still have some residual vision so they can still use the remaining sight to carry out their daily activities. Blind people who still have functional vision residues like this are called as "low vision" (Widjaya, 2012, p. 11-12).

Based on the explanation above, it can be concluded that blind learners are learners who have problem with their eyesight, either totally blind or partially blind where they need special media and methods to help their learning process.

1.7.3.2 Characteristics of Blind Learners

Blind learners have characteristics that are implications of losing information virtually because they cannot use their eyes to see information. According to Aqila Smart (2010, p. 39-40) the characteristics of blind learners are: 1) suspicious of others; 2) offended; and 3) Dependency. The characteristics of blind learners can be studied and interpreted further as follows:

1.7.3.2.1 Suspicious of others

According to Rudiyati (2002, p. 34) the malfunctioning of sight sense affects the reception of visual information when communicating and interacting. Blind learners do not understand the facial expressions of their interlocutor and can only understand

the voice. This affects the personality of blind learners when the interlocutor talks to other people in whispers. Therefore, it affects in loss of security and quickly become suspicious of others. Blind learners need to be introduced to people around their environment, especially family, neighbors, communities around their homes and schools.

1.7.3.2.2 Offended

The feeling of being offended is also influenced by the limitation that blind learner gets through their hearing. Joking and talking to each other when a blind learner interacts with other people can make a blind learner offended. Offended need to be overcome by introducing blind learners to the surrounding environment. This is to provide an understanding that everyone has characteristics in attitude, speech and how to make friends. (Rudiyanti, 2002, p. 35)

1.7.3.2.3 Dependency

Blind learners need help and direction in doing something new. However, such assistance and direction cannot be carried out continuously. This is done by blind learners who have the assumption that they feel safer with the help of others so that it will make blind learners have excessive dependence on others, especially on things that blind learners can do independently. (Aqila Smart, 2010, p. 39)

Based on the characteristics above, it can be concluded that the typical characteristics of blind learners are the result of visual loss of information. From the above characteristics, it can be seen that there are potential deficiencies and advantages, these potentials can be minimized to minimize the shortcomings.

1.7.3.3 Learning Methods for Blind Learners

Blind learners have their own learning methods because they cannot use their sense of sight. Lituhayu (2017, as cited in Dewi, 2019) states several learning methods that can be used by visually impaired students, namely 1) direct method; 2) total physical response (TPR); and 3) Lexical approach. The explanation of these methods will be explained below:

1) Direct method is a direct or face-to-face learning method. The direct method is carried out with the repeated exercise method. The use of direct method in teaching English initiates student learning awareness and involves students to know more about the meaning of the words they are learning and how to use them. In the direct method, all situations of students with low and high abilities can be easily bridged. Psychologically, using direct methods will move the learning process from the simple to the complex and from the real to the abstract. (Dewi, 2019, p. 45)

2) Total Physical Response (TPR), according to Dewi (2019, p. 45 – 46) Total Physical Response (TPR) is a learning activity that is repeated exercise and utilizes body movements and body language. In general, the use of TPR is an easy and easy way to be applied in language classes. Activities using physical activities also please students and teachers. Learning about vocabulary is the most appropriate material to be taught with TPR. A large number of classes can be helped by using the TPR method.

3) Lexical Approach, according to Dewi (2019, p. 46) Lexical approach is a learning method that is carried out by learning a word or sentence as a full context or through lexical pieces. The use of this lexical approach is done by using comic strips that help students learn in natural language.

1.7.4   Technology Enhanced Language Learning (TELL)

Language is one of the important elements that influence international communication activities. Learners make use of various parts of English skills such as listening, speaking, reading, and writing for their proficiency and communication (Grabe & Stoller, 2002). According to Bull and Ma (2001), technology provides language learners with unlimited resources. Harmer (2007) and Gençter (2015) emphasize that teachers must encourage learners to find suitable activities through the use of technology in order to be successful in language learning. Clements and Sarama (2003) state that the use of appropriate technological materials can be beneficial for learners. (Ahmadi, 2018)

(TELL) or Technology enhanced language learning deals with the impact of technology on the teaching and learning of a second language which is also called L2. Technology-enhanced language learning refers to using computers as a technological innovation to present multimedia as a complement to language teacher teaching methods. What is important to note is that TELL is not a teaching method but an approach that can be used with teaching methods to help teach. TELL is conceptualized according to activity (fill-in, making videos, chatting with classmates), skills (reading, writing, listening, speaking, grammar), location (mixed, distance, online) and technology (computer, Internet, chat, blogs, wikis, games, videos). (Kranthi, 2017)

1.7.5 Learning Media for Blind Learners

Media is one component of communication as a messenger from communicator to communicant (Criticos in Daryanto, 2010, p. 4). Meanwhile, learning is an effort to develop human resources that must be carried out continuously as long as humans live (Marno and Idris, 2009, p. 161). So, learning media is a communication component of the messenger from the communicator to the communicant in an effort to develop human resources continuously. Learning media is anything that

is used to transmit messages (learning materials), so as to stimulate student attention, interest, thoughts and feelings in learning activities to achieve certain learning objectives.

The impact of the development of science and technology also enriches learning resources and media such as radio, photos, slides, videos, computers, and many more. With the increase in media types, ideas began to emerge based on the purpose of use and the characteristics of each type of media. Quoted from Ibrahim, et al (2000, p. 25), certain media have advantages for certain learning, but the media are also weak for other learning purposes. Each type of media has different abilities to achieve learning goals according to the methods and characteristics of students.

According to Arsyad (2013) media is classified into visual media, audio media, and audio-visual media.

1) Visual media

Rosidah (2016, p. 123 – 124) stated that visual media is a medium for delivering messages or information technically and creatively which displays pictures, graphics, and clear layout so that the reception of messages and ideas can be received by the target.

Arsyad (2013) stated there are 2 types of visual media, there are projection and un-projection. Projection media is divided into two, namely OHP transparency and frame/slide film. Un-projection media is divided into five, namely reality media, model, graphic media, and picture or chart.

2) Audio Media

According to Dariyati et al., (2015), audio media is a medium to convey messages to be conveyed in the form of auditive symbols, both verbal and non-verbal. Another opinion said that audio media is a learning message introduced on the premise of sound that is planned

to refresh students' reflections, sentiments, considerations, and capacities. (Praptaningrum, 2020).

Based on Arsyad (2013) Audio media is divided into 2, namely radio and audio-tapes. Radio is electronic equipment that can be used to listen to the news, can find out some important and new events and events, life's problems, and so on. Radio can be used as a medium of learning which is quite effective in dealing with distance. Audiotapes are tapes that are often used in schools. The advantage is that the media is economical because the cost of procurement and maintenance is cheap, and can be reused.

3) Audio-Visual Media

(Haryoko, 2012) conveys that audio-visual media is media that has sound elements and image elements. The audio media can increase students' motivation and learning outcomes because songs containing subject matter can make the material easier to understand and store in long-term memory. (As cited in Hidayati & Pribadi, 2014).

According to Arsyad (2013), Audio-visual media is divided into 2, namely video media and computer media. Video media is one type of audio-visual media, other than film. Many have been developed for learning purposes, usually packaged on DVD. This media has all the advantages possessed by other media. In addition to being able to display text, motion, sound, and images, computers can also be used interactively, not just one way. Even computers connected to the internet can provide learning flexibility through time and space and provide almost unlimited learning resources.

Based on the discussion above, there are several learning media used by blind students in learning English, including: reglet and Stylus (Jazuli, 2016), Brailee Pocket Dictionary (Hasmah, Akbar, Muhammad, Rusnah,

2014), Audio book (Fansury, Lutfin, Arsyad, 2019), Screen reader, (Sulistyowati, Rafi, 2020).

1.7.5.1 Reglet and Stylus

Reglet and stylus are a pair of braille writing instruments that have a very important role in helping blind students write. according to Jajuli (2016, p. 65) Reglet is a tool in the form of a hinged plate that can be opened and closed. Inside the slab there are a number of squares such as small perforated windows. Each tile consists of 6 dots and 3 dots on the right and 3 dots on the left. In addition, inside the reglet there are 4 small nails that function as paper clips. while the stylus is a tool shaped like a sharp nail which serves to punch holes in the paper in the reglet.

1.7.5.2 Braille Pocket Dictionary

According to Hasmah, Muhammad, &Rusnah (2014, p. 134 – 135) Braille pocket dictionary is an English dictionary specially designed for visually impaired students, in which there are English vocabulary in braille writing using special braille writing paper. In this pocket braille dictionary, there is still no implementation of pronunciation because there are no braille letters that are used universally in pronunciation. because blind students can only feel writing, so when students say the word, the way they read it will be different from normal students.

1.7.5.3 Audio book

According to Fansury, Lutfin, & Arsyad (2019, p. 3) Audio books are learning materials used by blind students in helping students learn the material given by the teacher. Audio books are made to help blind students find information, as a lesson reference, and help blind students develop their independent research skills to

solve problems and answer questions. Audiobooks are created in an audible format that is available in multiple Languages.

1.7.5.4 Screen Reader

According to Sulistyowati & Rafi (2020, p. 98). Screen reader is a tool or software that is useful to help blind people use computer. Screen reader make it easy for blind students to read material, do assignments and answer semester exams. There are several characteristics found in screen reader software, namely:

1) This application can read text on computer screen in computerized voice.
2) Users can control what will be read by moving the cursor to the area containing the text with arrows on the computer keyboard.
3) Screen readers have been translated into various languages, one of which is Indonesian with a female voice
4) The speed of sound in this application can be adjusted according to the level of the user.

1.7.6 Guidebook of EFL Learning Media for Blind Learners

There are several guidebooks that can be used as a basis for teachers to determine appropriate learning media, namely: 1) Panduan Pengembangan Pembelajaran Aktif (Direktorat Pembinaan SMA, Dirjen Pendidikan Dasar dan Menengah, 2017), 2) Panduan Pengembangan Media Pembelajaran Sederhana (Kemendikbud, Dirjen Pendidikan Dasar dan Menengah, 2017), 3) Syllabus, and 4) Lesson Plan.

1.7.6.1 Panduan Pengembangan Pembelajaran Aktif Guidebook

Panduan Pengembangan Pembelajaran Aktif guidebook is a book published by the directorate general of primary and secondary education of

the ministry of education and culture in 2017. In the foreword it is stated that this book is used as a reference for schools and teachers in managing and implementing learning activities. This guidebook is a supporter of the 2013 curriculum implementation which can be improvised, innovated and further developed by schools. With this guidebook, schools and teachers are required to be critical, creative, innovative, and adaptive in using it. the contents of this guidebook include an explanation of active learning, methods of developing active learning, and media that can be used in learning.

1.7.6.2 Panduan Pengembangan Media Pembelajaran Sederhana Guidebook

Panduan Pengembangan Media Pembelajaran Guidebook was published by the Directorate General of Primary and Secondary Education of the Ministry of Education and Culture in 2017. In the introduction to this guidebook, it is explained that this guidebook is intended to support the implementation of the 2013 curriculum in all schools throughout Indonesia. This guidebook consists of four chapters. the first chapter contains an introduction or background to the making of this book, the second chapter discusses simple learning media, the third chapter discusses the application of simple learning media, and the fourth chapter is the closing.

1.7.6.3 Syllabus

A syllabus is an overview of a subject or course that is systematically arranged, containing objectives, subjects and sub-discussions, time allocation and sources of materials used. (Bermaw Munthe, 2011, p. 203) The syllabus provides directions on what must be achieved in order to achieve the learning objectives and what methods will be used. In addition, the syllabus also contains what assessment techniques are used to test the extent of learning success (Rusmiyati, 2019). according to the book "*How to Create a Syllabus*" (Gannon, 2018), there are 12

components including: 1) course information, 2) Instructor Information, 3) Course goals, 4) course material and requirements, 5) course policies, 6) attendance, 7) late or missed work, 8) Academic Honesty, 9) Technology, 10) Accessibility and Inclusion, 11) Grading and assessment, 12) Course schedule and calendar.

1.7.6.4 Lesson Plan

Lesson plan is a learning plan that describes the procedures and organization of student learning to achieve one basic competency (KD) that will be carried out by the teacher in one or more meetings of the learning and teaching process in the classroom or other learning places (Gunawan, Asrifan, 2020, p.33). In Permendiknas No. 41 of 2007 regarding process standards explains that a complete lesson plan consists of Identity, Competency Standards (SK), Basic Competencies (KD), Time Allocation, Achievement Indicators, Learning Objectives, Learning Materials, Learning Methods, Learning Activities, Learning Resources, and Evaluation. Because one of the teacher's roles in the learning process is as a lesson planner, every teacher in the education unit, including the English teacher, is obliged to prepare a complete and systematic lesson plan for effective and quality learning. Learning that takes place effectively and with quality will have implications for improving the quality of the process and learning outcomes of students.

1.7.7 Need Analysis

The crucial element that needs to be carried out at the very beginning of the production of materials is needs analysis. According to Hutchinson and Water (1987), there are two components of need analysis. The first is target needs, and the second is learning needs. Target needs have three components, there are necessities, lacks, and wants. Necessities in this term are determined by the target situation. "Lack" is the gap

between necessities and what the learner already knows. "Want" is learners' subjective needs that have no direct relationship between the objective needs perceived by the teachers and course designers.

To specify the needs of EFL learning media for blind learners, the researcher classifies the types of media into four basic English skills, namely listening, speaking, reading, and writing. Below, the researcher explains it in detail:

1.7.7.1 Kinds of Media Used in Listening Skill

The researcher classifies the types of media used in listening skills into four media based on several studies read including Audio Books, Audio recording, handphone, and laptop. A more detailed explanation will be presented below.

1.7.7.1.1 Audio book

According to Fansury, Lutfin, & Arsyad (2019, p. 3) Audio books are learning materials used by blind students in helping students learn the material given by the teacher. Audio books are made to help blind students find information, as a lesson reference, and help blind students develop their independent research skills to solve problems and answer questions. Audiobooks are created in an audible format that is available in multiple Languages.

1.7.7.1.2 Audio Recording

Haryoko (2012) explains that Audio recording media is media that has sound elements. These media can increase students' motivation and learning outcomes because songs containing subject matter can make the material easier to understand and store in long-term memory (Hidayati & Pribadi, 2014). The use of this media aims to optimize the sense of

hearing that is still functioning properly. The advantages of audio recording media in learning activities in general are to practice skills related to aspects of listening skills (Badiah, 2016). This media contains messages in auditive form (can only be heard) so that they can stimulate thoughts, feelings, attention, and assist in acquiring knowledge, skills, or attitudes. Learning with interactive audio modules as media for students (as cited in Praptaningrum, 2020, p. 7)

1.7.6.2 Kinds of Media Used in Speaking Skill

The researcher classifies the types of media used in speaking skills into four media based on several studies read including Audio Book, braille pocket dictionary, handphone, and laptop. A more detailed explanation will be presented below.

1.7.6.2.1 Audio book

According to Fansury, Lutfin, & Arsyad (2019, p. 3) Audio books are learning materials used by blind students in helping students learn the material given by the teacher. Audio books are made to help blind students find information, as a lesson reference, and help blind students develop their independent research skills to solve problems and answer questions. Audiobooks are created in an audible format that is available in multiple Languages.

1.7.6.2.2 Brailee Pocket Dictionary

According to Hasmah, Muhammad, &Rusnah (2014, p. 134 – 135) Braille pocket dictionary is an English dictionary specially designed for visually impaired students, in which there are English vocabulary in braille writing using special braille writing paper. In this pocket braille dictionary, there is still no

implementation of pronunciation because there are no braille letters that are used universally in pronunciation. because blind students can only feel writing, so when students say the word, the way they read it will be different from normal students.

1.7.6.3 Kinds of Media Used in Reading Skill

The researcher classifies the types of media used in reading skills into four media based on several studies read including Braille book, Braille box, screen readers, handphone, laptop. A more detailed explanation will be presented below.

1.7.6.3.1 Braille Book

Suharso and Retnoningsih (2005, p. 93) state that braille is a writing and printing system for the blind. Braille is one of the means in the form of special writing that is very important for the blind. Braille book is one of the means to assist the blind in accessing information and knowledge by maximizing the use of the sense of touch. for blind learners, braille books are one of the keys to literacy so that they can still access and obtain information. (As cited in Nahlisa, Rukilah, Christiani, 2015, p. 3-4)

1.7.6.3.2 Braille Box

According to Usnawa, Hayati, Abadi, Aniyah, Miranti, and Putri (2019, p. 2) explain that the braille box media is a learning medium used to improve the reading ability of the blind. This media works by reading letters and words in braille form in response to every stimulus that blind learners get on the media they touch. This media is claimed to be very helpful for blind learners who have difficulty reading Braille.

1.7.6.3.3 Screen Reader

According to Sulistyowati & Rafi (2020, p. 98). Screen reader is a tool or software that is useful to help blind people use computer. Screen reader make it easy for blind students to read material, do assignments and answer semester exams. There are several characteristics found in screen reader software, namely:

1) This application can read text on computer screen in computerized voice.

2) Users can control what will be read by moving the cursor to the area containing the text with arrows on the computer keyboard.

3) Screen readers have been translated into various languages, one of which is Indonesian with a female voice. The speed of sound in this application can be adjusted according to the level of the user.

1.7.6.4 Kinds of Media Used in Writing Skill

The researcher classifies the types of media used in speaking skills into four media based on several studies read including reglet and stylus, braillewriter, handphone, and laptop. A more detailed explanation will be presented below.

1.7.6.4.1 Reglet and Stylus

Reglet and stylus are a pair of braille writing instruments that have a very important role in helping blind students write. according to Jajuli (2016, p. 65) Reglet is a tool in the form of a hinged plate that can be opened and closed. Inside the slab there are a number of squares such as small perforated windows. Each tile consists of 6 dots and 3 dots on the right and 3 dots on the left. In addition, inside the

reglet there are 4 small nails that function as paper clips. while the stylus is a tool shaped like a sharp nail which serves to punch holes in the paper in the reglet.

1.7.6.4.2 Braille typewriter (Braillewriter)

Braillewriter is a tool used to produce Braille writing by pressing the buttons available on the typewriter. The braille typewriter has six keys to produce braille letters, one space key in the middle, and two keys to move the paper on the left and right sides (Hasmah, Muhammad, &Rusnah, 2014, p. 130). Typewriters have undergone modification changes that can help blind students to make it easier for them in the process of learning to write, as quoted by Jawapos.com, published on February 7, 2020, a person named Anggi modified the typewriter by adding a box that has been fitted with a small digital layer to which this layer is connected. with several wires attached to the electronic circuit so that it can produce sound. The function of the sound generator is to find out whether the typed results are appropriate or not.

For handphone and laptop, the researcher categorizes them into all English skills because handphone and laptop provide applications that can facilitate the learning of these four basic English skills. Both of them provides an advantage for students to be able to develop their potential and maximize their understanding of the learning materials provided by the teacher (Muntaha, 2018, p. 2). According to Brown (1993) The use of handphone and laptop in learning English can be categorized as a new system in learning. Mastery of language is part of human learning in general, closely related to personality, closely intertwined with culture of

second language learning, involves distraction, create new linguistic systems, and learning of discourse and communicative functions of language. (As cited in Muntaha, 2018, p. 3)

1.8 Previous Research

In this topic, the researcher discusses the previous research used as the basis for conducting this research. Previous studies used by the researcher as a reference in writing this research are "Student Profiles in the 21st Century: How Blind Students Learn English" written by Maryam Amaliyah (2020), "Pengajaran Bahasa Inggris Untuk Anak Luar Biasa" written by Kadek Yati Fitria Dewi (2019), "Penerapan Bahan Ajar Audio untuk Tunanetra" By Agnes Praptaningrum (2020), "Audio Books as Teaching Media to Blind Students in Learning EFL" written by Andi Hamzah Fansury, Nursamsilis Lutfin, and Susalti Nur Arsyad (2019), and "Pemanfaatan Media Pembaca Layar pada Mahasiswa Tunanetra di STKIP PGRI Jombang" written by Heny Sulistyowati and Muhammad Farhan Rafi (2020).

In the research "Learners' Profile in 21st Century: How Blind Students Learn English" written by Maryam Amaliyah (2020) explains about 21st century learning requires students to have communication, collaboration, creativity and critical thinking in which the skills mentioned are the needs for all students, both normal students and students with physical disabilities, for example blind students. This research aims to explore how blind people learn English and find out blind student skills that are appropriate to the 4C of 21st century skills. The method that used in this research is qualitative descriptive. The data was collected by interview.

In the research "Pengajaran Bahasa Inggris Untuk Anak Luar Biasa" written by Kadek Yati Fitria Dewi (2019) explain the things that need to be considered in the learning process for children with special needs such as teachers, training, curriculum, facilities (providing facilities both rooms and media), evaluation and learning strategies which are described in detail in this research.

In the research "Penerapan Bahan Ajar Audio untuk Tunanetra" written by Agnes Praptaningrum (2020) discusses how important it is to hone blind learners'

listening skills by using learning materials in the form of audio. The purpose of the research was to test the effectiveness of audio teaching materials for blind learners in junior high school. The results of this research explain that by using audio media blind students are more motivated and can easily understand learning, and can learn and imagine the sound heard with audio so that blind students can better understand the material presented.

In the research "Audio Books as Teaching Media to Blind Students in Learning EFL" written by Andi Hamzah Fansury, Nursamsilis Lutfin, and Susalti Nur Arsyad (2019) explained about the application of audio books as teaching media for blind students in learning English. The purpose of this research was to determine the implementation of audio books as learning media for blind students in learning English and to determine the audio books used in EFL learning. The results showed that the application of audio books as a teaching medium for blind students in learning English can help students in the learning process. The application of audio books also increases the motivation of student in learning because it makes it easier for students to research anywhere and anytime.

In the research "Pemanfaatan Media Pembaca Layar pada Mahasiswa Tunanetra di STKIP PGRI Jombang" written by Heny Sulistyowati and Muhammad Farhan Rafi (2020) Explaining the media Screen readers are able to provide convenience in understanding lecture material because this media provides a sound effect on the computer for all the material given by educators in the lecture process and doing assignments. The method used in this research is descriptive qualitative. From the results of observation and interview obtained data that screen reader media is able to provide convenience to blind students in reading material, doing assignments and answering semester exams.

From the explanation of previous studies above, the researcher has an interest in researching the needs of EFL learning media for blind learners. This research wants to examine in more detail what kind of media suits the needs of blind learners, especially those that support their English language skills in the 21st century.

1.9 Frame of Thought

The elements that frame this research include learning in the 21st century, language learning in the 21st century, and TELL as the main object of the research. To clarify how each element relate to each other, the frame of thought in this research is illustrated in the diagram below.
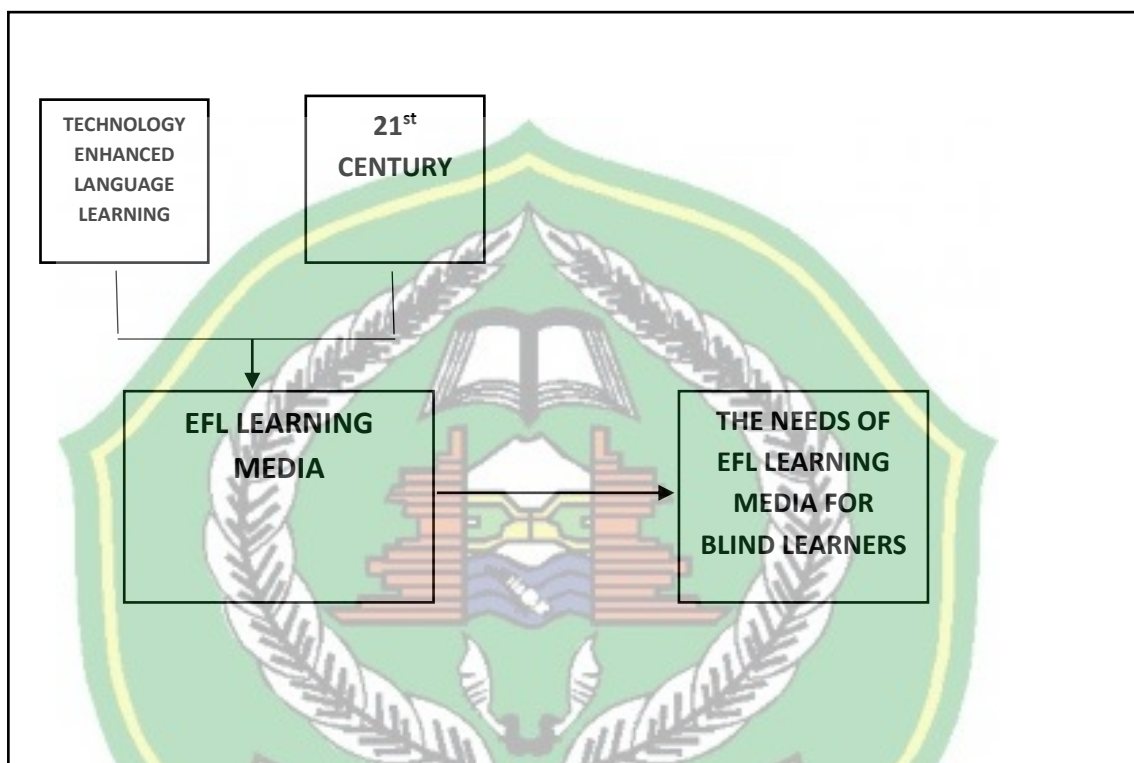

Figure 1. Diagram of the frame of thought of this research.

Fundamental ideas of the researcher in conducted this research start from the focus of this research that is Technology enhanced language learning. Then the researcher explained some theories of technology enhanced language learning and the element of technology enhanced language learning especially EFL learning media for blind learners. Thus, it is as a concern of this research. The researcher briefly describes the definition of Technology enhanced language learning. The last as the result provides detailed information regarding the Technology Enhanced language learning (EFL Learning Media) for blind learners.

1.10 Research Method

This sub-chapter discuss about the research design and steps of the research, sources and types the data, data collection techniques and instruments, data analysis techniques, and the research timeline.

1.10.1 Research Design and Steps of the Research

This research uses qualitative approach. Bogdan and Taylor (in Moleong, 2006) define a qualitative method as a research procedure that produces descriptive data in the form of oral written words from people and observable behavior. Kirk and Miller (in Moleong, 2006) define that qualitative research is a particular tradition in social science that fundamentally depends on observations of humans both in its area and in terms.

Meanwhile, Sugiyono (2008) argues that the qualitative method is a research method based on the philosophy of post positivism, used to examine natural objects, where the researcher is the key instrument, the sampling of data sources is done purposively and snowball, triangulation research techniques (combined), data analysis is inductive / qualitative, and the results of qualitative research emphasize meaning rather than generalization.

The qualitative method is used because this research is directed to obtain facts related to the need analysis of EFL learning media for blind learners.

This research design uses case research. Case research is included in descriptive analysis research, which is research that is carried out focused on a particular case to be carefully observed and analyzed thoroughly. To begin case research, the researcher first identifies the problem or question to be investigate and develop a rational for why case research is an appropriate approach to be used in the research (Lodico, Spaulding, &Vougetle, 2006). This research is intended to research intensively about the background of the situation and position of an event

that is currently taking place, as well as the natural interactions of certain social units. (Lodico, Spaulding, & Voegtle, 2010).

This research use steps that adapted from Lodico, Spaulding, Voegtle (2019) and Nashruddin and Mustaqimah (2020), there are two stages in this research. stage 1 answers the first research question, stage 2 answer second research question, below the researcher describe more about the tw stages in this research:

1.10.1.1 Stage 1

Stage 1 answer the first research question: How is the implementation of EFL learning media for blind learners?

1) Identifying the topic or focus of research.

   The topic of this research is EFL learning media for blind learners.

2) Analysing the lesson plan

3) Do the observation

   The researcher does the observation based on the analysis finding to collect the data. The researcher take place for observation in SLB-A Beringin Bhakti. The steps that the researcher took are analysis of lesson plan and observe the learning process.

4) Selecting Participants

   The researcher chooses eleventh grade students of senior high school, the teacher and parents. The place takes in SLB-A Beringin Bhakti Kabupaten Cirebon.

5) Writing foreshadows questions.

   In this step the researcher arranges an overview of the questions that will be presented to the participant.

6) Collecting the data

   The data collection is carried out using interview.

7) Analyzing the data

In this research, the data are analyzed through reading and review the data (interview transcript).

8) Interpreting the data

The data will be analyzed through gathering and arranging data, validating data, as well as synthesizing and interpreting data from the data that have been obtained.

1.10.1.2 Stage 2

Stage 2 answers the second research question: What are the needs of EFL learning media for blind learners in the 21st Century?

1) Selecting Participants, the researcher choose eleventh grade of senior high school, the teacher and parents. The place takes in SLB-A Beringin Bhakti Kabupaten Cirebon.

2) Writing foreshadows questions. In this step the researcher arranges an overview of the questions that will be presented to the participant.

3) Collecting the data

The data collection is carried out using interview.

4) Analyzing the data

In this research, the data are analyzed through reading and review the data (interview transcript).

5) Interpreting the data

The data will be analyzed through gathering and arranging data, validating data, as well as synthesizing and interpreting data from the data that have been obtained.

1.10.2 Sources and Types of Data

The data source is the subject from which the data was obtained. (Arikunto, 2006). Data source include two types, namely primary data source and secondary data source. Primary data source is data obtained

directly from the object of research derived from interview. In this research, primary data were obtained from interview with the research object, namely Senior high school blind learners and also from observation. Meanwhile, secondary data source is data that measure primary data. Secondary data sources in this research are documentations.

However, the types of data in this research are hand-recorded notes about documents such as journals, thesis, books, and transcriptions of the interview.

1.10.3 Data Collection Techniques and Instruments

Data collection techniques are techniques or methods that researcher use to collect data. There are several data collection techniques that are usually carried out by researcher. Researcher can use one or a combination of the existing methods depending on the problem at hand (Kriyantono, 2009, p. 93).

There are three data collection techniques used in this research, including:

1.10.3.1 Content Analysis

According to Sugiyono (2008), content analysis is a process with a qualitative approach by conducting an in-depth analysis of the data and information obtained so that researchers can find new knowledge, hypotheses, or knowledge. In content analysis, several stages must carry out, namely the description stage, the reduction stage, and the selection stage. The description stage describes what the researcher sees, hears, feels, and asks. In the reduction stage, the researcher reduces the information obtained in the first stage to focus on specific problems. At the selection stage, the researcher describes the focus set in more detail.

1.10.3.2 Observation

This research uses observation to answer the first research question. Observation is a data collection method that is used by making observations accompanied by recording the state or behavior of the target object which is carried out directly at the location which is the object of research (Murni, 2008). The purpose of observation is to describe the setting, the activities that occur, the people involved in the activities, the time of the activity and the meaning given by the actors being observed about the events in question. The observation in this research aims to identify, view, and record class activities in using EFL Learning Media for blind Learners. This observation was made by the researcher itself.

1.10.3.3 Interview

This research uses interview as data collection technique to answer the second research question. An interview is a conversation with a specific purpose. The conversation was carried out by two parties, namely the interviewer (interviewer) who asked the question and the interviewee (interviewee) who gave the answer to the question. The intentions of conducting interviews, as emphasized by Lincoln and Guba (1985, p. 186) in Moleong (2011, p. 186), include: constructing about people, events, organizations, feelings, motivations, guidance, concern, and other unanimity; to reconstruct such roundness as experienced in the past; project rounding as expected to be experienced in the future; verify, modify and expand the constructs developed by the researcher as checking members. The type of interview used in this research is an open standard interview, namely using standard questions. The order of the questions, the words, and the way they are presented are the same for each respondent. The flexibility of conducting probing questions is limited, and it depends on the interview situation and the interviewer's skills. Such interviews are used

when it is deemed necessary to reduce as much as possible the variations that can occur between one person and another. The purpose of implementation is none other than an attempt to eliminate the possibility of errors (Moleong, 2011, p. 188). Interviews are used with structured interview techniques because researcher set their own problems and questions to be asked (Moleong, 2011, p. 190).

1.10.4 Data Analysis Techniques

Analyzing consists of taking the data apart in order to assess and summarize the individual responses. Analyzing and interpreting of the data includes drawing a conclusion about it, describing it in tables, statistics, and photographs to summarize it and explaining the findings in words to address our research questions. (Creswell, 2012). The researcher carries out three stages to conduct data analysis: data reduction, presentation, and verification. The explanation explains below.

1.10.4.1 Data Reduction

Reducing data is sorting out data consider necessary to provide a clear picture and make it easier for researchers to collect further data. The researcher aims to conduct data reduction so that the information obtained from existing sources can meet the research objectives set.

1.10.4.2 Data Presentation

The data presented in this qualitative research is carried out in the form of a narrative to support the presentation of the data to make it easier to understand. The presentation of data will make it easier for researchers to provide the intended information to assist researchers in explaining in detail the data to be analyzed.

1.10.4.3 Data Verification

After reducing the data on the sample, the researcher then presented the data in narrative form. The next step is drawing conclusions and verification. Conclusion drawing and verification were carried out to answer the problem formulation and research objectives that the researcher has made.

1.10.5 Research Timeline

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

1) For determining the research question, the researcher allocated 1 day.
2) For designing the research, the researcher allocated 1 week.
3) For collecting the data, the researcher allocated 3 weeks.
4) For analyzing the data, the researcher allocated 2 weeks.
5) For generating the finding, the researcher allocated 2 weeks.
6) For validating the findings, the researcher allocated 2 weeks.
7) For reporting, the researcher allocated 3 weeks.

The researcher made the planning for three months (August – October).

No	Activities	Months													
		August				September					October				
		1	2	3	4	1	2	3	4	5	1	2	3	4	5
1	Determining the research question	■													
2	Designing the research		■	■											
3	Collecting the data				■	■	■								
4	Analysing the data							■	■						
5	Generating the										■	■	■		

	finding									▨	▨	▨			
6	Validating the finding												▨	▨	
7	Reporting														▨

Table 1 (research timeline)