CHAPTER I
INTRODUCTION

1.1. Background of Research

In this day and age, technology plays a critical role in our lives. Every activity we engage in our daily lives, for the most part, involves the use of technology. Technologies assist us in completing our tasks. Not only that, but technology is also used for social connections. In education, technology aids us in learning new things and obtaining knowledge rapidly. Educational technology is the study and application of ethics to help students learn and perform better by developing, implementing, and managing appropriate technological procedures and resources (Januszewski & Molenda, 2013). Technology plays an essential role in people's daily lives and may be used effectively in education for a variety of purposes (Almurashi, 2016). As a result, technology has a significant impact on the learning process, particularly in supporting the study of English in this period. We all know that English is one of the world's languages. In this age of globalization, we must study English as an international language.

According to Kirkwood and Linda (as referenced in Tasneem, 2017), TELL (Technology Enhanced Language Learning) refers to the employment of information and communication technologies in the pedagogical teaching-learning process. TELL is an effective technique in learning and developing language abilities when learning English as a foreign language, according to various research conducted in Vietnam, such as Huynh Huu Thanh, 2016; Tri Hoang Dang and Nguyen Thi Hong Nhung, 2014 (as referenced in Thao, Tham, and Ngan, 2019). It improves the efficiency, effectiveness, and motivation of learning. As a result, TELL can be defined as the use and impact of technology on the teaching and learning of language especially English language.

There are numerous ways to learn English utilizing TELL (Technology Enhanced Language Learning), particularly in the learning of the English language. Technology can be utilized to help and enhance learning in a variety of ways. In its broadest definition, the term "technology" can refer to both *hardware* – such as interactive whiteboards, smart tables, handheld technologies, tangible objects – and *software* – e.g. computer-supported collaborative learning systems,

learning management systems, simulation modeling tools, online repositories of learning content and scientific data, educational games, web 2.0 social applications, 3D virtual reality, etc (Peter Godyear and Symeon Retalis, 2010). Using applications in the learning process is one of the approaches to teach English language in modern day. According to Nasution (2019), one of the instruments that might assist the instructor in the teaching and learning process in a class, especially in EFL classrooms, is application. Visual and audio media are the two types of media. It signifies that in the learning process, the application is *software* of technology that can be used in learning proccess.

YouTube, WhatsApp, LINE, WeChat, Google Meet, Ruang Guru, Google Classroom, Zoom meeting, Facebook, Instagram, Telegram, Kahoot, E-Mail, Gmail, Google, and so on are just a few examples of learning tools available today by application. According to KEMENDIKBUD in an article for CNBC Indonesia, the Ministry of Education and Culture Indonesia will offer 19 free applications in 2020; Aminin, Ayoblajar, Bahaso, Birru, Cakap, Duolingo, Edmodo, Eduka system, Ganeca digital, Google classroom, Kipin School 4.0, Microsof Education, Quipper, Ruang Guru, Rumah Belajar, Sekolah.Mu, Udemy, Zenius and WhatsApp.

Teachers and students are using applications in their learning processes as a result of the globalization period. There are numerous learning applications available on the internet that can assist both teachers and students in the teaching and learning process. Learning any subject, including English, becomes much easier with the use of a learning application (Aminatun and Oktaviani, 2019). People all over the world are becoming interested in applications. According to Nasution (2019), YouTube application does not only have fun videos, but it can also be used as a learning media, as there are many educational videos at every level, beginning with beginner, intermediate, and even advanced. It means that teachers must be creative in order to select appropriate media for their students, such as the application YouTube.

Technology and education cannot coexist in the twenty-first century, particularly when it comes to learning the English language. 21st Century Skills refer to the skills that are required to enable an individual to face the challenges of

the 21st century world that is globally-active, digitally transforming, collaboratively moving forward, creatively progressing, seeking competent human-resource and quick in adopting changes (21st Century Handbook, 2020, p.14). Teachers use applications to teach their students English. In this day and age, students are expected to be more than just communicative; they are also expected to be more creative, have good critical thinking skills, and be able to collaborate with others. As a result, make the most of instructional media, particularly the YouTube application (Sari, 2019). It means that teachers used application to pique their students' interest.

According to Herri mulyono's (2016) thesis, the Quipper application assists teachers in exposing students to L2 input, facilitating interaction among teachers, students, and between teachers and students, and determining whether the application promotes students' linguistic production. The WeChat application, according to Shi et al. (2017) thesis, can be used for language learning. Create a new method of English learning with the help of WeChat instant messaging, improving language immersion and motivating learners. Then, according to Alqahtani's (December, 2018) thesis, with the WhatsApp application, there are numerous opportunities for all students to share their thoughts on any given topic, particularly those who are too shy to speak up in class or who need some time to plan, think, and respond.

Previous research focused on the use of Google Classroom in the learning process. According to (Syakur, Sugirin, and Widiarni, 2020), learning English through the Google Classroom application simplifies the lecture process. Google classroom-based learning applications are extremely effective at encouraging students to learn English and supporting new insights. The Google Classroom application makes learning enjoyable for students, allowing them to feel at ease. This application can be used effectively to assist lecturers and students in English education study programs in carrying out the learning process more thoroughly. The thesis of Fatimannisa et al. (2020), she discusses the use's findings. The Ruangguru application demonstrated that students had a positive perception; this could not be separated from the benefits of the Ruangguru application itself. Based

on the findings, some students commented that the Ruangguru application is a good online learning platform.

According to previous research, the use of TELL (Technology Enhanced Language Learning) by application there are a variety of applications that can be used for teaching English language learning. The majority of previous research demonstrated how to use applications in the learning process, as well as the effectiveness of the application in the learning process and demonstrated how teachers use applications for students to motivate students to learn English. The previous study also demonstrated that applications have many advantages in the learning process, as well as that students' and teachers' perceptions of applications are favorable.

According to Ari Amnan (2020), he discovered that the difficulties of using media applications are not shared by all students, such as the cost of purchasing internet data, a mobile phone, and a reachable and stable internet signal. Teachers and students may require eligible infrastructures in order to conduct the class properly. In addition, Haya Haratikka (2020) supported Ari Amnan's research, discovering that the obstacles were caused by the internet data package. As we all know, the use of online learning is inextricably linked to the internet data package. The more they use the more data package they squander. Because not all students come from middle-class families where it is still difficult to make ends meet, they must now work extra hours to support their online classes. According to the research, one of the challenges they face at home is an unstable internet connection.

Based on the findings of the previous study, the researcher is interested to investigate the use of TELL in application for learning English in the 21st century and determining the difficulties of teacher and students in using applications in English learning the in Vocational high school level. It is critical to understand the use of applications for learning process in the 21st century, because in the 21st century, everyone must understand how to solve the problem of using applications, particularly for learning. In this age of globalization, we must adapt. As a result, the preferred application would be a good medium for learning English.

The researcher selects a vocational high school in Cirebon that has produced graduates who meet both national and international standards. According to

smkbuanahari.wordpress.com (2011), Buana Bahari Marine vocational high school in Cirebon is currently the only private school in West Java that has established a Commercial Ships Nautical Skills Department/ Competency and Commercial Ship Engineering, which was established in 1987. As a result, the researcher is interested in selecting Buana Bahari Marine vocational high school in Cirebon as the place to get the data. Because of that reason, the researcher would like to search more by the title "THE USE OF TECHNOLOGY ENHANCED LANGUAGE LEARNING IN THE 21ST CENTURY IN A VOCATIONAL HIGH SCHOOL".

1.2. Identification of Phenomenon

One of the most important aspects of the research is the identification of the phenomenon. After researchers have made a decision on the phenomenon to be researched, identify the phenomena that have been compiled. As a result, the identification phenomenon of this research relates to the background of the research, and the researcher discovered many phenomena to be identified in this research, which are as follows:

1) The use of TELL (Technology Enhanced Language Learning) by media applications in learning process in the 21st century.
2) The difficulties of using application in learning process.
3) At this school produced graduates with national and international standards.
4) Buana Bahari Marine vocational high school in Cirebon is currently the only one private school in West Java.

As a result of this phenomenon, the fact that this school has high standards and produces graduates with national and international credentials indicates that English has become an important subject in this school. As a result, in the twenty-first century, the researcher is interested in learning what the difficulty in using media applications in learning English language are, as well as which applications most commonly are used in this school based on teacher and student preferences.

1.3 The Main of Phenomenon

Based on the identification of the phenomenon, the main of the phenomenon is the use of TELL in application for learning English in the 21st century and the difficulties of teacher and students in using applications in English learning.

1.4 Limitation and Focus of Research

The topic of this study has limitations. The research's limitation is that it focuses on a single topic and does not allow for a broad discussion. There are a number of limitations in this study. The focus of this research are the use of TELL in application for learning English in the 21st century and the difficulties of teacher and students in using applications in English learning. Following that, the researcher concentrated on vocational level first grade, i.e. class 10, with only ten students and one teacher from this level. The emphasis of this research is the use of applications based on 21st century in 4C skill in learning proccess.

The researcher focused on the English teacher and students at Buana Bahari Marine vocational high school located in Cirebon for the purpose of this study. Because students at Buana Bahari Marine Vocational High School come from both locals and residents from outside the area. This school has produced graduates with national and international standards, demonstrating that the English teacher at Buana Bahari Marine vocational high school provides the best quality in the strategy and media of teaching English, making it easy for students to learn English.

1.5 Research Question

The researcher formulates the research questions as follow:

1) How to use TELL in application for learning English in the 21st century at Buana Bahari Marine vocational high school?
2) What are the difficulties of teacher and students in using applications in English learning at Buana Bahari Marine vocational high school?

1.6 Aims of Research

This research intended to meet the following aims:

1) To investigate the uses TELL in application for learning English in the 21st century at Buana Bahari Marine vocational high school.
2) To investigate the difficulties of teacher and students in using applications in English learning century at Buana Bahari Marine vocational high school.

1.7 Significances of Research

To assist learners in learning a foreign language, the use of appropriate applications in teaching English has become an expected one. Many things have changed since the turn of the century. The integration of language learning in the 21st century has also changed the strategy for teaching English. The process of teaching English should include the learning skills required in the 21st century. This century expects learners to have 21st century learning skills such as critical thinking, creativity, collaboration, and communication.

Hopefully, the outcomes of this study will be useful to the researcher. The potential outcome is projected to provide theoretical and practical benefits to the following parties:

1.7.1 Theoretically Significance

This study is expected to provide information to the researcher and others in the educational field who are dealing with the use of TELL in application for learning English in the 21st century and the difficulties of teacher and students in using applications in English learning can be effective and efficient to solve the problem in teaching in the 21st century. Furthermore, this study will serve as a helpful description and resource for any other scholars who wish to pursue the same topic.

1.7.2 Practical Significance

For teacher, the researcher hoped that the English teacher at vocational high school will get more information about the use of TELL in application for learning English in 21st century and the difficulties of teacher and students in using applications so they can study successfully by choosing a good application in teaching and learning process.

1) For teachers, the researcher hoped that English teachers at vocational high schools would learn more about the use of TELL in application for learning English in 21st century and the difficulties of teacher and students in using applications so that they could teach effectively the students.

2) For researcher, researcher hoped that the students would receive proper treatment in English learning so that they would love studying English and would not face any obstacles during the process.

3) For reader, the reader will learn more use of TELL in application for learning English in 21st century and the difficulties of teacher and students in using applications at vocational high schools, particularly at Buana Bahari Marine vocational high school in Cirebon, by reading this study. In addition, it will provide guidance on how to choose appropriate media applications for teaching and learning in the 21st century.

1.8 Previous Research

Previous research is a common subject that researchers use to compare and uncover areas of research that have not been investigated by other researchers. In this study, the researcher draws on previous research from national and international journals and theses to clarify and limit understanding of the difficulties of using application and favorite application in the 21st century in teaching practice at Buana Bahari Marine vocational high school.

The first is a journal from Aminatun and Oktaviani (2019) conducted research entitled *"Memrise: Promoting Students' Autonomous Learning Skill through Language Learning Application"*. Aminatun and Oktaviani investigate the use of Memrise, a language learning app, to improve students' independent learning skills outside of the classroom, particularly in the study of English. A descriptive study of eighteen Management students who were taking English for Business II was done. The results of the questionnaire and interview revealed that the Memrise program aids students in learning English and, in particular, improving their vocabulary. Furthermore, because it is accessible from anywhere and at any time, students can learn English whenever they wish. As a result, it effectively enhances students' independent learning abilities while also improving their English skills.

Second, Irmayanti and Arifin (2020) conducted research entitled *"Students' Voice on Instagram as Technology Assisted Learning: A Case Study at Senior High Students"*. Irmayanti and Arifin's jounal looks into students' explorations of Instagram's potential as a medium for learning that is primarily focused on technology. Qualitative research methods are used by researchers. The study's population comprised of 27 second-grade children from MIPA 1 of SMA 4 Barru. Purposive sampling was used to collect the sample. A questionnaire test and an interview were employed as study tools. The data research reveals that Instagram

has a positive reaction as a learning media, with users posting learning videos, short quizzes or exams, task consultations, and information media, among other things. The data shows that, so far, the comprehension of how to use Instagram features and how to utilize Instagram effectively has been successful.

Third, Syakur at.al (2020) a journal conducted research entitled *"The Effectiveness of English Learning Media through Google Classroom in Higher Education"*. The quantitative descriptive study with the explanatory survey method was utilized by Syakur and colleagues. Population and sample were employed in the study. Learning English with Google Classroom, as a result of the research, makes the lecture process much easier. Google Classroom-based learning apps are great for encouraging fresh ideas and inspiring students to learn English. The Google Classroom application makes learning enjoyable for pupils, allowing them to feel at ease. Learning, engaged students, successes, learning processes, complete scores, not complete ye, and success are all markers of the effectiveness of Google Classroom Online Media Communication in English teaching departments. The usage of Google Classroom can help students in English study programs enhance their average achievement of English curriculum. The findings of this study show that this application can be used effectively to assist lecturers and students in English education study programs in carrying out the learning process in a more in-depth manner.

The next previous study was conducted by Fatimannisa et.al (2020) conducted research entitled *"Students' Perception on the Use of Ruangguru Application in Their English Learning"*. Fatimannisa and colleagues employed a hybrid technique approach (qualitative and quantitative). Interview, population, and sample were all used in the study. Students' perceptions of the use of the Ruangguru application in their English learning were good, with a mean score of 70. According to the students, 5 (20.8 percent) students were defined as Strongly positive, 10 (41.7 percent) students as Positive, 5 (20.8 percent) students as Moderate, 3 (12.5 percent) students as Negative, and 1 (4.5 percent) student was labeled as Strongly negative. It was discovered that the majority of pupils enjoy utilizing Ruangguru in their English classes.

Sherlyi Pregitha (2020) did a similar study called "The Use of Ruangguru for Students Learning English." Qualitative research was used in Sherlyi Pregitha's thesis. The purpose of this study is to learn about the advantages of using Ruangguru for students learning English in class IXH at SMP N 17 in Jambi City during the academic year 2019/2020. The participants in this study were 8 students from class IXH at SMP N 17 in Jambi City, as well as teachers from Ruangguru. The findings of this study show that Ruangguru can increase students' English skills, particularly in grammar, vocabulary, listening, and reading, and that all students and teachers had good attitudes toward Ruangguru's use in English learning. Overall, the students' impressions of Ruangguru's use for pupils learning English were positive. Ruangguru is an online learning tool that is incredibly useful, engaging, and beneficial.

Next previous research is a journal from Wael Abdulrahman Almurashi (2016) conducted research entitled "*The Effective Use of Youtube Videos for Teaching English Language in Classrooms as Supplementary Material at Taibah University in Alula*". His investigation revealed that the YouTube application could be a useful tool for incorporating English courses and aiding comprehension. It was discovered that using YouTube to help students understand their English classes, enhance their performance, and increase their comprehension of English can be quite beneficial. Additionally, YouTube's multimodal text can be quite useful in aiding learners' comprehension of English teachings. Both qualitative and quantitative methods were used in this study. The subjects of the study were interviewed and given an online survey to complete.

In similar study, Ayu Astriani (2018) conducted research entitled *"Integrating Video Blog in EFL Class for Teaching Speaking"*. The Ayu Astriani journal used a mixed method quasi experimental design as the research approach, with data collection approaches including a speaking test, semi structured interview, observation, and documentation. Two classes of first-graders in SMAN 4 Kendari provided the samples. Based on the data gathered, it was discovered that the experimental group improved more than the control group. Both groups' gain scores were assessed and compared. The results revealed that the experimental group improved their speaking fluency more than the control group. As a result, the

incorporation of the video blog resulted in a significant improvement in the students' English proficiency. The second finding was obtained by asking students about their experiences with face-to-face and online sessions with video blogs. The majority of the students expressed satisfaction with the video blog as a learning tool. They found that learning on the YouTube platform was more enjoyable.

Here, as in the Zhilal El Furqaan (2020) study, the study was an experimental study employing Anova model analysis. The participants in this study are first-year university students in Indonesia who are enrolled in the MPK Bahasa Inggris course, with a sample size of 50 students. Based on the findings of the research hypothesis test, this study concludes that using Google Classroom and Google Docs has a considerable impact on students' capacity to compose essays. The acquisition of Sig. = 0,000 < 0.05 and Fh = 195,286 demonstrates this. As a result, this study demonstrates that collaborative online tools like Google Classroom and Google Docs can be used to teach writing.

Ninth, in a partial replication of this study (Saovapa Wichadee and Fasawang Pattanapichet, 2018) entitled *"Enhancement Of Performance And Motivation Through Application Of Digital Games In An English Language Class"* found that a treatment that involved the use of an application According to a poll conducted by Kahoot, pupils showed favorable sentiments on the use of digital games in language learning. The goal of the study was to see how a digital game affected students' learning performance and motivation. Two groups of students participated in a quasi-experimental investigation. The experimental group received instruction via the digital game Kahoot, while the control group received instruction via the traditional manner. This study used pre-tests, post-tests, and questionnaires to assess students' motivation and attitudes toward gamification in language learning. Independent t-tests and One-way Analysis of Covariance were used to analyze the data. At 0.05, the findings revealed statistically significant differences in learning performance and motivation. The experimental group outperformed the control group, and students in the experimental group were substantially more motivated than those in the control group.

In similar study, Sofyan Syaehuri (2020) conducted research entitled *"The Effectiveness of Using Kahoot! Application on Students' Reading Achievement at*

Seventh Grade of Smpn 15 Cirebon". Sofyan Syaehuri's thesis looks on how students use the Kahoot! Program, which is offered by the teacher, to assess their reading and how they apply their skills of reading comprehension to Kahoot! The goal of this study was to see if the Kahoot! App could be utilized to test students' reading comprehension skills in SMPN 15 Cirebon. To obtain the data, 52 pupils were separated into two classes, each of which had 26 pupils. Tested instruments were utilized to obtain data. The test was pre-test and post-test, and one of the classes was designated as an experimental group to get the treatment. The results demonstrate that the experimental class scored higher in both the treatment and post-test after using the Kahoot! App. Before utilizing Kahoot!, the average score was After utilizing Kahoot! app had a score of 68. After using Kahoot! to measure students' reading comprehension, the mean score increased to 92,3, indicating that there is a significant effect.

The last research has been conducted by (Dr. Mohammad Abd Alhafeez Ali Ta'amneh) in 2017, entitled *"The Effect of Using Whatsapp Messenger in Learning English Language among University Students"*. During the academic year 2015/2016, his research discovered the influence of utilizing WhatsApp messenger on learning English among university students. The study included 40 first-year university students as participants. They were split into two teams. The experimental group consisted of 19 students who were taught using a mixture of WhatsApp and traditional learning. The control group consisted of 21 students who were taught in a traditional manner. The findings of this study revealed that the experimental and control groups of pupils had different levels of achievement. This difference was in the experimental group's advantage. The differences between the two groups revealed that including the WhatsApp application into English language training increased the experimental group's ability.
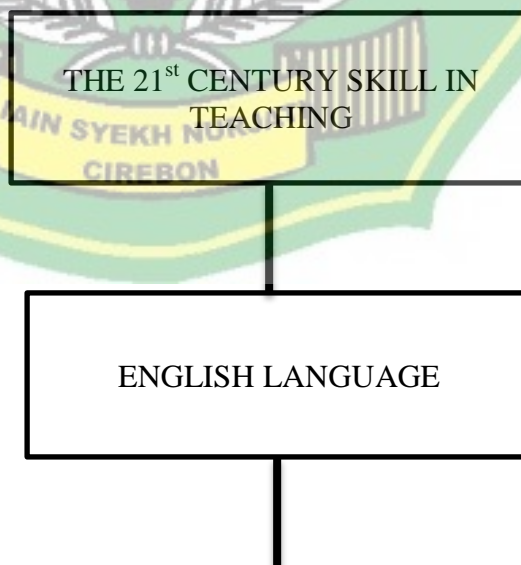
It may be concluded that the twenty-first century is linked to technology, implying that teachers in this globalization era must follow the trend of incorporating technology into the learning process. Based on prior research, the use of TELL (Technology Enhanced Language Learning) through the use of media applications in the twenty-first century, there are numerous applications that are utilized in the learning of the English language. The majority of past study has
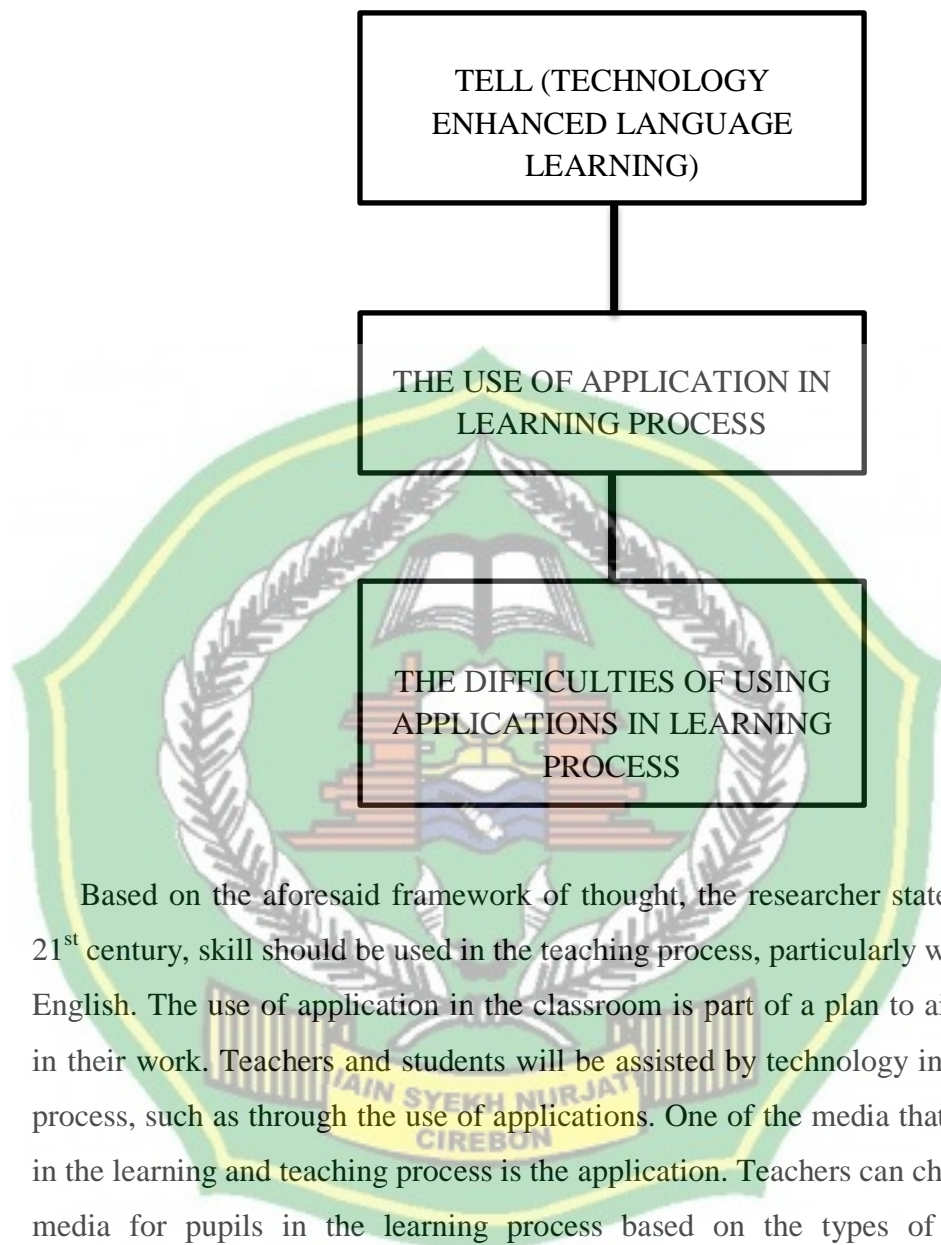
demonstrated the impact and efficacy of using media applications in the learning process. As a result, the researcher will look into the challenges of using media applications, as well as the most popular app utilized at Buana Bahari Marine vocational high school.

1.9 Framework of Thinking

Technology has become a significant part of media learning in the 21st century. Teachers, as facilitators in the learning process, must employ effective ways to make pupils feel at ease during the learning process, particularly when studying English. In the 21st century, teachers must consider the technology that is employed as a learning medium. In current period, applications have become popular, and there are numerous media applications that can be utilized to learn English. Students and teachers have benefit from the use of applications in the learning process. Teaching in the 21st century emphasizes on teachers' abilities to teach students to communicate, collaborate, be creative, and think critically, as well as incorporating technology into the teaching process. As a result, the following is the research's conceptual framework:

Table 1.1
The Framework of Thinking

THE 21st CENTURY SKILL IN TEACHING

ENGLISH LANGUAGE

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┌─────────────────────────────┐
│   TELL (TECHNOLOGY          │
│  ENHANCED LANGUAGE          │
│      LEARNING)              │
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│  THE USE OF APPLICATION IN  │
│     LEARNING PROCESS        │
└─────────────────────────────┘
              │
┌─────────────────────────────┐
│  THE DIFFICULTIES OF USING  │
│  APPLICATIONS IN LEARNING   │
│         PROCESS             │
└─────────────────────────────┘
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Based on the aforesaid framework of thought, the researcher states that in the 21st century, skill should be used in the teaching process, particularly when learning English. The use of application in the classroom is part of a plan to aid instructors in their work. Teachers and students will be assisted by technology in the learning process, such as through the use of applications. One of the media that can be used in the learning and teaching process is the application. Teachers can choose the best media for pupils in the learning process based on the types of applications available.

1.10 Theoretical Foundation

For research, the theoretical foundation is the base upon which all knowledge is built. The researcher will use this theoretical foundation as a guide to conduct the investigation. There are several things related to this research entitled "The Use of Technology Enhanced Language Learning in the 21st Century in A Vocational High School", they are: 21st Century Skills in Teaching, English Language, TELL (Technology Enhanced Language Learning), The Use Of Application In Learning

Process, and The Difficulties Of Using Applications In Learning Procces. Those consisted below as follow:

1.10.1 Teaching

Teaching is a collaborative effort between teachers and students to attain set objectives. The most crucial feature of teaching is that teacher-student interactions are fair, with reciprocal communication occurring between the two, either directly or indirectly or through the media (Riyana.C, nd). It is reasonable to deduce that teaching is the process of supporting individuals in learning something that necessitates interaction with a teacher who is educated about the subject as a guide. According to Smith, 2004 (as cited in *Nature of Teaching: What Teachers Need to know and Do*) teaching is defined as the process of carrying out actions that have been proven to be beneficial in causing pupils to learn through experience. He continues by stating that teaching is defined as "everything that leads to learning."

Frimpong, 1990 (as cited in *Nature of Teaching: What Teachers Need to know and Do*) the process by which a teacher conveys knowledge, skill, attitudes, and values to learners with the objective of changing their behavior is defined as teaching. The teacher's function, according to Riyana.C (nd), is not confined to simply imparting knowledge; the teacher also serves as a guide, developer, and management of learning activities aimed at attaining predefined objectives. It can be construed to suggest that a teacher is accountable for more than simply teaching; they must also develop learning components that will assist students in reaching their objectives.

1.10.2 Teaching in the 21st Century

It is critical for teachers to use the 4C skill in the teaching process in 21st century education. Learning and creativity skills are increasingly being acknowledged as characteristics that identify pupils who are equipped for a more dynamic 21st century life and work environment. Teaching in the twenty-first century should be student-centered.

According to Paternship 21, focusing on creativity, critical thinking, communication, and collaboration is crucial in preparing pupils for the future. People refer to the 4C's Skill as the skills that must be integrated into the learning process in order to reach the 21st century educational standard. According to the NEA (National Education Association), teachers must use the 4C skills of communication, collaboration, creativity, and critical thinking when giving instruction, motivating students, providing information, problem solving, evaluating students' ideas, identifying students' ideas, and stimulating students' creative and critical thinking. In particular, standard education of soft skills should be learned by teachers during the teaching process in the twenty-first century. It is important to acquire 4C skills in order to be a successful citizen outside of school and to prepare young citizens for global development.

1.10.2.1 The Aspects of 4C Skills in Teaching Practice

The primary goal of 4C teaching skills is to determine what teachers and the main purpose of 4C teaching skills is to figure out what teachers and students should do in the classroom in order to have successful teaching and learning processes that improve students' capacity, knowledge, and achievement. There are four parts of 4C skills in instructional practice: critical thinking, communication, teamwork, and innovation. The following is a description of them:

1.10.2.1.1 Communication

According to Hixson, Ravitz, and Whisman (2012) (as cited in Tindowen, Bassig & Cagurangan, 2017) communication skills refer to students being able to organize their thoughts, data, and findings and share these effectively through a variety of media as well as orally and in writing.Individuals' ability to communicate clearly is referred to as communication. The partnership of 21st-century skills establishes specific communication requirements, which include:

1) Effectively communicate thoughts and ideas in a variety of methods and circumstances using oral, writing, and nonverbal communication abilities. The three parts of communication skill, such as oral, written, and interpersonal communication, according to (Deakin, 2015).

2) Listen carefully to discover meanings (Including information, beliefs, attitudes and intentions). Communication can be used for a variety of reasons, including educating, instructing, encouraging, and persuading. Teachers motivate pupils by holding competitions and delivering verbal praise such as "excellent" and "very good" in order to pique their interest in learning (Ainunningsih, 2018).

3) Evaluate the effectiveness of various media, technology, and know-how, listen effectively to decipher meaning, including knowledge, values, attitudes, and intentions, use multiple media, technologies, and know-how to a priori evaluate their efficacy and effects, and communicate effectively in a variety of environments (including multi-lingual). Teachers also employ tools and pictures as learning material to aid students' comprehension by providing information (Sowell.J, 2017).

1.10.2.1.2 Collaboration

Collaboration is the ability to work effectively with others. This skill entails cooperating while taking actions that respect the needs and perspectives of others, as well as contributing to and accepting the outcome (21st Century Handbook, 2020). Some indicators of collaborative skills include students' ability to overcome their friends' nervousness when speaking in front of a class or an audience. According to Hixson, Ravitz, and Whisman (2012) (as cited in Tindowen, Bassig & Cagurangan, 2017) collaboration skills refer to students being able to work together to solve problems or answer questions, to work effectively, and, respectfully in teams, to accomplish a

common goal, and to assume shared responsibility for completing a task.

Collaboration is defined as working with others to complete a shared task in a flexible, effective, and equitable manner. According to (Advisory teaching team of NET section, 2008), teachers' duties in collaboration are as follows:

1) In the classroom, classifying students,
2) Innovating new ways to form a group
3) Supervising group activities that require students to collaborate and discuss,
4) Giving feedback to help solve group issues.

It will teach kids how to cooperate on ideas in the classroom by utilizing teamwork. Teachers in the classroom should incorporate these elements into the teaching process. To encourage students to discuss their tasks together, teachers classify and organize them into group work and peer work. Teachers ensure that group activities require students to collaborate and negotiate during the learning process. Then, when they've presented in front of the group, give them criticism and a point.

1.10.2.1.3 Creativity

According to Hixson, Ravitz, and Whisman (2012) (as cited in Tindowen, Bassig & Cagurangan, 2017) creativity and innovation skills refer to students being able to generate and refine solutions to complex problems or tasks based on synthesis, analysis, and then combining or presenting what they have learned in new and original ways. According to (Trailing & Fadel, 2012), instructors and learning settings can foster creativity by encouraging:

1) Questioning entails asking questions, analyzing and solving problems, as well as exploring and evaluating ideas.

To improve and optimize their creative efforts, teachers can employ a range of tactics for developing ideas (such as brainstorming), creating unique and significant ideas (both incremental and radical notions), and elaborating, refining, analyzing, and evaluating their own ideas. The students are then able to collaborate creatively with others in order to develop, implement, and successfully communicate new ideas.

2) Digital content. Video, PowerPoint, and online materials are all included.

Teachers use integrated creativity skills in teaching to encourage students to collect questions and to evaluate students' ideas by asking questions. Teachers allow students to use digital materials such as video, PowerPoint, and online resources to find information.

1.10.2.1.4 Critical Thinking

Critical thinking and problem-solving skills, according to Trilling and Fadel, include the ability to reason effectively, ask pointed questions and solve issues, analyze and assess various points of view, and reflect. Teachers will use reason in the classroom by allowing students to submit their arguments, after which teachers will evaluate the students' ideas by providing comments. Teachers will pose questions to pupils in order to encourage them to think critically in order to solve the challenges. Teachers then invite them to share and learn together to address the challenge. Meanwhile, teachers evaluate pupils by identifying their thoughts and drawing conclusions. The final task is a reflection, which will take place at the end of class. Students are encouraged to reflect on the material they have gained during the learning process by their teachers. According to Hixson, Ravitz, and Whisman (2012) (as cited in Tindowen, Bassig & Cagurangan, 2017) critical thinking skills refer to students being able to analyze complex problems, investigate

questions for which there are no clear-cut answers, evaluate different points of view of sources of information, and draw appropriate conclusions based on evidence and reasoning.

1.10.3 English Language Learning

Language is the most important thing in our lives because it is a tool for people to communicate with one another. English is the most important language to master in this digital age because it is now an international language. In this global age, most people use English as a communication medium, making it easier for people from different countries to connect and communicate.

Language learning is the process of getting knowledge of language. According to an article from *www.edu.gov.mb.ca* S2 English Language Arts entitled "*Language and Language Learning*" stated that learning a language is a lifelong process that begins at birth and lasts until death. Students learn languages by expressing their thoughts, feelings, and experiences, forming relationships with family and friends, and attempting to make sense of their surroundings. They might show up at school speaking more than one language. Respect for and development of each student's first language is essential. Prior knowledge of a first language will benefit in the learning of a second language.

The English language is one of the most widely spoken languages in the world, and it is widely used as an international language. As a result, English language learning is the process of acquiring knowledge of the English language through study. With the advancement of technology, learning a language, particularly English, may take place anywhere and at any time.

1.10.4 Technology

The word technology is made up of two words: techno (art) and Logia (logos), which both denote science (Sari Widuri, 2018). Technology is tools that can help people do their jobs more efficiently. According to Jack Febrian, 2001 (as cited in *Modul Perkuliahan Teknologi Komunikasi:*

Pengertian Teknologi dan Teknologi Komunikasi,2018) technology is the application of science and engineering to move machines and procedures in order to expend and improve the human condition or not to improve human efficiency in various aspects.

An article from *arydj.files.wordpress.com* entitled "*Pengertian Teknologi*" said that for us, Understanding how to use tools and crafts, as well as how this influences our ability to manage and adapt to our natural environment, is referred to as technology. Technology can refer to a wide range of items, including systems, organizational methods, and processes, as well as objects that are beneficial to humans, such as machines. Several academics have defined technology. Isman's (2012) point of view backs up this article (as cited in *The Use of Technology in English Language Learning: A Literature Review, 2018)* he stated technology use include not only equipment (hardware) and instruments, but also structured interactions with other humans, machines, and the environment.

1.10.4.1 Technology Enhanced Language Learning (TELL)

TELL (Technology Enhanced Language Learning) according to Kirkwood and Linda, 2017 (as cited in *Impact of Technology Enhanced Language Learning (TELL) in Promoting ESL Learners' Reading Comprehensibility and Skills: Students' and Teachers' Perceptions*) in the pedagogical teaching-learning process, it refers to the use of information and communication technology. According to some studies conducted in Vietnam e.g. Huynh Huu Thanh, 2016; Tri Hoang Dang and Nguyen Thi Hong Nhung, 2014 (as cited in *Attitudes toward the Use of TELL Tools in English Language Learning among Vietnamese Tertiary English Major, 2019)*, TELL is a useful tool for learning and improving language skills when studying English as a second language. It improves the efficiency, effectiveness, and motivation of learning. As a result, TELL can be defined as the use and impact of technology on the teaching and learning of English.

Technology can be utilized to help and enhance learning in a variety of ways. In its broadest definition, the term "technology" can refer to both

hardware – such as interactive whiteboards, smart tables, handheld technologies, tangible objects – and *software* – e.g. computer-supported collaborative learning systems, learning management systems, simulation modeling tools, online repositories of learning content and scientific data, educational games, web 2.0 social applications, 3D virtual reality, etc (Peter Godyear and Symeon Retalis, 2010).

Kurzweil, 1999 (as cited in *English Language Learning and Technology, 2003*) Significant shifts in areas of immediate concern for English language education and research was foreseen. He has made specific predictions regarding the changes he expects to occur in communication and education as a result of technological advancements. According to Carrol Chapelle (2003) Students will learn to practice applied linguistics with technology by learning applied linguistics through technology, according to the argument. Although other disciplines can teach us a lot about technology and how to use it, applied linguistics technology cannot be taught separately from applied linguistics – i.e., as a supplement to the academic material and procedural knowledge of applied linguistics that has already been covered. Teachers must learn to use computer technology to create and implement materials for teaching and assessing English, as well as engage in innovative teaching and assessment using technology. In other words, technology can be used as a medium in the teaching and learning of English.

1.10.5 Application

Application is one of the mediums that can be used in the learning process. According to Winia Waziana, Leni Anggraeni, and Nur Laela Sari (2016), one of the basic English learning methods that requires the use of fun that can stimulate student interest and make it easier to understand the subject matter is the adoption of interactive multimedia learning media in the form of applications / software-based computers. The application products can be downloaded on Android-powered smartphones and devices, which are usually already available on Google Play or the Play Store.

An application, according to Dhanta, 2009 (as cited in Waziana et al. 2016), is computer software that performs specific tasks, such as the macromedia flash player, Microsoft Word, and Microsoft Excel. According to Rachmad Hakim S, 2013 (as cited in Waziana et al. 2016), the application is software that is used to manage windows and games, among other things. This means that an application is software from technology that is used in the learning process, particularly when learning English.

1.10.5.1 The Use of Application in Learning Process

Online distance learning meets the needs of an ever-growing population of students who cannot or prefer not to participate in traditional classroom settings. These learners include those unable to attend traditional classes, who cannot find a particular class at their chosen institution, who live in remote locations, who work full-time and can only study at or after work, and those who simply prefer to learn independently.

The minimum requirement for students to participate in an online course is access to a computer, the Internet, and the motivation to succeed in a non-traditional classroom. Online courses provide an excellent method of course delivery unbound by time or location allowing for accessibility to instruction at anytime from anywhere. Learners find the online environment a convenient way to fit education into their busy lives. The ability to access a course from any computer with Internet access, 24 hours a day, seven days a week is a tremendous incentive for many of today's students.

Some of the main advantages of online learning include:

1. Convenience: 24/7 access from any online computer; accommodates busy schedules; no commuting, no searching for parking.

2. Enhanced Learning: Research shows increased depth of understanding and retention of course content; more meaningful discussions; emphasis on writing skills, technology skills, and

life skills like time management, independence, and self-discipline.

3. Leveling of the Playing Field: Students can take more time to think and reflect before communicating; shy students tend to thrive online; anonymity of the online environment.

4. Interaction: Increased student-to-teacher and student-to-student interaction and discussion; a more student-centered learning environment; less passive listening and more active learning; a greater sense of connectedness, synergy.

5. Innovative Teaching: Student-centered approaches; increased variety and creativity of learning activities; address different learning styles; changes and improvements can translate to on-ground courses as well

6. Improved Administration: Time to examine student work more thoroughly; ability to document and record online interactions; ability to manage grading online.

7. Savings: Accommodate more students; increased student satisfaction = higher retention and fewer repeats.

8. Maximize Physical Resources: Lessen demand on limited campus infrastructure; decrease congestion on campus and parking lots.

9. Outreach: Give students options; reach new student markets; appeal to current students thus increasing enrollments.

1.10.5.2 The Use of Application in Learning Process

In the learning procces usually there are steps teacher and students do the activities in the classroom while in the learning process. Then, in the learning procces by using application also there are various steps. According to Haya Haratikka (2020), there are four categorization of the online applications to maximalize the learning English process:

1. Discussion forum
2. Classroom learning

3. Exercise

4. Video

1.10.6 The Difficulties of Using Applications in Learning Process

Of course, there are benefits to using online applications for learning, but there are also drawbacks to using online applications for learning. There are numerous challenges that students and teachers face when using online applications. According to Marzuki et al. (2021), several difficulty constructs on the use of online applications based on teacher perception exist, such as:

1. No experience in using e-learning in the teaching process

2. Not having enough knowledge and skills in using e-learning

3. Do not undermine your self-esteem by using an e-learning mode during the learning process. No confidence in using e-learning mode in the learning process there's no benefit to using e-learning

4. Trust about the use of e-learning has no benefit

5. Do not have enough time to prepare the material they will teach their students

6. The school does not have an e-learning system to support its school's teaching and learning process

7. Schools do not support with internet connection

8. Schools do not support them in using e-learning

9. Textbooks are incompatible with the use of e-learning

10. The content of the subject matter cannot be taught through e-learning mode content of difficult subjects taught using e-learning content of difficult subjects taught using e-learning

11. The content of the subjects is difficult for students to understand through e-learning Assessment of students who do not like e-learning

12. Learning and teaching resources available on e-learning systems are not suitable in learning Students do not have the device to support the use of e-learning

13. Assessment of students who do not like e-learning Students do not have an internet connection to support the use of e-learning

14. Students cannot access e-learning systems

1.11 The Methodology of Research

1.11.1 Research Method and Design

A research design is the logic that connects the research purpose and questions to the processes for collecting empirical data and analyzing data in order to draw conclusions from the data) (Bloomberg & Volpe, 2008; Rowley, 2002; Yin, 2009). Flick (2009, p. 39) confirmed that qualitative research is geared toward analyzing concrete cases in their temporal and local specificity, beginning with people's expressions and activities in their local contexts. This study is using the qualitative method. Qualitative research is research in the form of description, where researchers describe the results of their research by collecting data and related information. According to Creswell (2012, p. 26) in qualitative research, several things must be discussed about the problem and develop an understanding of existing phenomena, have an understanding of the literature, determine the objectives and research questions in general and broadly as participants' findings, Gather data from various sources to strengthen research.

Because the results of this research are presented in spoken or written documents based on the interview transcript and document study, this thesis used research design descriptive qualitative research. Because the data from the interview transcript in words, the descriptive qualitative approach was chosen as the research approach. In general, research using qualitative methodology has the following characteristics (Kriyantono, 2009, p. 57-58):

1) Intensive, long-term participation of researchers in field settings, researchers are the main research instrument.

2) Very careful recording of what happened with field notes and other types of documentary evidence.

3) Field data analysis.

4) Report the results including detailed descriptions, quotes and comments.

5) There is no single reality; every researcher creates reality as part of his research process. Reality is seen as dynamic and as a product of social construction.

6) Subjective and in the reference of researchers only. Researchers as a means of extracting data interpretation.

7) Reality is holistic and indivisible.

8) Researchers produce unique explanations of the situation that occurred and the individuals.

9) More in depth than breadth.

10) Research procedures: empirical-rational and unstructured.

11) The relationship between theory, concept, and data: data raises or forms a new theory.

The goal of this study is to look into the use of TELL in application for learning English in the 21st century and the difficulties of teacher and students in using applications in English learning at Buana Bahari Marine vocational high school.

1.11.2 Source and Type of Data

According to Arikunto (as cited in Wahidah, 2016, p. 54), "the data resource is the subject from which the data can be found." The data used or discovered by the researcher is referred to as the data source.

In this study, the researcher used a variety of sources. The researcher conducted this research in Buana Bahari Marine School. It is located at Cirebon, West Java. The data for this study came from an English teacher and a first-grade student from Buana Bahari Marine vocational high school, who were observed and interviewed as the subject. In the use of TELL in application for learning English in the 21st century and the difficulties of teacher and students in using applications in English learning, the researcher used field notes as sources, and she created a transcript of the teacher's and student's interviews. In a qualitative study, primary data comes from actions and words, while supplemental data comes from written sources. Textual data, photographs, or statistical data are examples of documents (Meleong, J. Lexy, 2005). If the

researcher utilized an interview to obtain data, the source of data is someone who responds to or answers the researcher's questions.

Table 1.2

Codes of Data

No.	Category	Coding
1.	Researcher	R
2.	Teacher	T
3.	Student 1	S1
4.	Student 2	S2
5.	Student 3	S3
6.	Student 4	S4
7.	Student 5	S5
8.	Student 6	S6
9.	Student 7	S7
10.	Student 8	S8
11.	Student 9	S9
12.	Student 10	S10

1.11.3 Instrument of the Research

The researcher is the study's instrument. According to Ary et al., 2010 (as cited in Lestari N, 2019), the primary research in qualitative studies is conducted by the researchers themselves. As Lodico et al (2006, p. 106) defined

it, self-developed instruments are those that are created by the researcher for a specific setting or group of participants and will be used to collect data by the researcher. This equipment was used to gather information from valid interviews. As a result, in this study, the main instrument of observation and reality is the researcher. As a result, the researcher is the primary instrument in this study.

1.11.4 Technique of Data Collection

In this study, the researcher utilized the descriptive approach to collect data; therefore she employed observation, interview, and study record as tools.

1) Interview

An interview is a dialogue between two or more persons for the purpose of gathering and sharing information. An interview is a meeting between two persons with the purpose of exchanging information and ideas through question-and-answer style, resulting in dialogue and joint development of meaning on a certain issue Estenberg (cited in Sugiono, 2017). In research, an interview is a question-and-answer process that takes place face to face between two or more people who are listening directly to information or statements (Narbuko & Achmad, 2003).

Interviews consist of oral questions asked by the interviewer and oral responses by the research participants. Interviews typically involve individual respondents, but there is increasing interest in conducting group interviews. Respondents typically speak in their own words, and their responses are recorded by the interviewer, either verbatim on audiotape or videotape, through handwritten or computer-generated notes, or in short-term memory for later note-taking. The interviewer is largely in control of the response situation, scheduling with the participant a mutually agreeable time and place and then controlling the question pace and sequence to fit the circumstances of the situation.

The researcher completed the document by conducting an interview with the English teacher at Buana Bahari Marine vocational high school as

the research's primary respondent, followed by an interview with a student as a supplementary respondent for data collection. These interviews were recorded using an audio recorder and the WhatsApp application. In this situation, the researcher acts as an interviewer, asking questions, marking responses, requesting explanations, taking notes, and prodding participants (dig for the deeper information). The type of interview question was predetermined based on the use of TELL in application for learning English in the 21st century and the difficulties of teacher and students in using applications in English learning.

2) Documentation

Documentation is one of the qualitative data collection techniques. According to Creswell (2012, p. 223), documentation is classified into two types: private documentation and public documentation. Several items are recorded in the public domain and archived in the library; this is a reference to public documentation. Personal forms of documentation, such as diaries, journals, or anything they write for themselves, are then referred to as private documentation. The documentation provides valuable information to assist the researcher in conducting a qualitative study.

In the qualitative method, the researcher used the document as a valuable source of data. These documents are public and private records obtained through qualitative research concerning the study's setting or participants. The document that has been analyzed in this study is screen shoot by application that used in learning process. For addition documentation took photos from the process of interview with the teacher and the students.

1.11.5 Technique of Data Analysis

The data analysis was carried out by looking at the issues of the use TELL in application for learning English in the 21st century and the difficulties of teacher and students in using applications in English learning. The researcher used the results of the field notes, observation checklist, and interview transcript to come to a conclusion on this study. The researcher looked at other documents such as a screen shot taken throughout the teaching process. The steps of data

analysis are adapted by the researcher (Sugiono, 2017). The steps are as follows:

1) Data reduction

The process of sorting the main thing, focusing on the vital things, searching for themes and patterns, and discarding the ones that aren't needed is known as data reduction. The decreased data will provide a clearer understanding and make it easier for researchers to collect data in the future (Sugiono, 2017).

The data was analyzed through the first stage of data reduction. The researcher summarized the data interview, field note, document, and observation checklist with the things related to the topic of research that the use of TELL in application for learning English in the 21st century and the difficulties of teacher and students in using applications in English learning based on the research findings. This research's research question was answered in accordance with the investigation's goal and the perceived data.

2) Data display

Following data reduction, data display is the next phase. A display is an organized, compressed assembly of information that permits conclusion drawing and action (Miles and Huberman, 1994). The data that has been reduced can be effectively organized and presented according to a pattern, making the material easier to comprehend. As is customary, qualitative data is displayed in the form of short descriptions, charts, category correlations, flowcharts, and the like. The outcomes of data that was reduced into categories such as communication, collaboration, creativity, and critical thinking in the usage of application were classified by the researcher. The results of the data reduction were then classified use of TELL in application for learning English in the 21st century and the

difficulties of teacher and students in using applications in English learning.

3) Conclusion drawing

The third phase of data analysis, according to Miles and Huberman (Sugiono, 2017), is to withdraw and check conclusions. A conclusion can be believable if it is based on good evidence and consistent data collecting. The third step of qualitative data analysis is the conclusion. From the start of data collection, the qualitative analysis is beginning to decide what things mean is noting regularities, patterns, explanations, possible configurations, causal flows, and propositions (Miles and Huberman, 1994). Conclusions are also verified as the analyst proceeds. The conclusion drawn is started after the data were collected by making a temporary conclusion

As a result, the research's final analytic phase was to draw conclusions. The researchers found the core point that concluded based on the findings after obtaining the data presentation point of data collection (interview and documentation). So, the findings of this study can be utilized to determine the use of TELL in application for learning English in the 21st century and the difficulties of teacher and students in using applications in English learning.

1.11 .6 Research Timeline

The amount of time allotted for research is crucial to the researcher since it allows him or her to complete the study promptly in accordance with the research schedule. As a result, the data collecting takes around four months to complete.

Table 1.3

Research timeline

NO	Activity	Mei'21				June'21				July'21				August'21			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1.	Preparing research proposal	■															
2.	Instrumental development of research proposal		■														
3.	Instrumental try out of research proposal			■													
4.	Revision of research proposal				■												
5.	Asking agreement to the principal of the school for doing survey					■											
6.	Conducting data from interview							■									
7.	Analysing data from interview								■								
8.	Sorting data from interview								■	■	■	■					
9.	Making data conclusion													■	■		
10.	Finalization of research															■	■