

# CHAPTER I

## INTRODUCTION

In this first section, the researcher will explain the background of the study to introduce the explanation of the topic that will be discussed in this study and the explanation of the background that can be seen bellow.

### 1.1 Background of The Study

Speaking is the one of basic skills in English that need to be mastered. The problem is speaking skills have become a real challenge even for teachers and students (Juraboev, 2021). Speaking English as a foreign language in Indonesia is still taboo in some people or society because not many people in Indonesia can master speaking in English. The data about speaking English ability in Indonesia is proven according to the *English First English Proficiency Index* (EF EPI) based on data conducted in the 2022 edition that Indonesia is in position 81 out of 111 countries (EF EPI, 2022). The students will feel embarrassed or shy when speaking in English and reduce their interest in practicing speaking. That problem is become a major issue for students in Indonesia as EFL learners. This problem can happen because of habit and the way of learning at school needs to be updated and adapted to the evolving situation. The lack of learning level in Indonesian students is also caused by curriculum changes every short period (Zein et al., 2020).

Based on 21<sup>st</sup>-century learning that priority to the development of skills including critical thinking, problem-solving, and digital literacy for future students in careers in the modern era (Trilling & Fadel, 2009). Wiraningsih & Santosa(2020) also state that in the 21<sup>st</sup> century learning more needs to involve learning processes such as critical thinking and problem-solving skills that are needed in the future. This means that learning needs to use new media and appropriate ways to achieve learning objectives of soft skills in the 21<sup>st</sup> century. Things that affect the problem in learning to learn English are the way of learning, the environment of students at school, and course, the facilities that support student learning activities. Learning media is useful for teachers to be able to expand the learning insight provided to students (Ediyani et al., 2020). The ineffectiveness distribution of English learning is because there are systems and learning media that have not been able to keep up

with the modern era and do not pay attention to the process and digital literacy or technology can be integrated with the learning process.

Furthermore, the students need to practice their speaking even without a partner, which means need a tool such as AI technology that can be integrated to support or assist practice speaking. The technology itself now provides evidence as support for learning English as a Foreign Language (Putrawan & Riadi, 2020). According to Santosa 2023, AI become an alternative to help and assist daily life. The lack of use of technology as a medium for learning English can also make education lagging in Indonesia in the 21<sup>st</sup> century. Technology as a part of digital literacy is media or tool in the form of software or hardware that is used by humans in the modern era to help sustain human needs and increase the value of development, including in the field of education as a learning media (Erben et al., 2009). Technology media in the form of hardware can be like laptops, smartphones, and other gadgets that can support the retaliation process or during assignments. As a learning media, technology can also be used in software such as AI, zoom applications, Google Meet, e-learning, as well as social media applications for students to create their work as part of their learning assignments to practice their English, especially speaking skills.

AI (Artificial Intelligence) as a part of software technology is an intelligence system developed in the form of an intelligent machine or software that can imitate human thinking by collecting a lot of databases. The term AI for the first time and was coined by John McCarthy in 1956 he said that AI is the science or technique of making a program or computer-based application and also an intelligent tool (Russel & Norvig, 2016). AI is currently developing and growing faster which means cannot stop it; we just can maximize the feature and can be dangerous if we as a human cannot properly use AI. This AI ability actually can be used in learning English, like in this case, especially in the aspect of speaking skills. AI can be used to learn English because it can collect a lot of data that can imitate something around us. AI at this time has various types of programs or application software that can be found and will still grow. AI can be adequate for practice speaking, and there are several options for that such as digital assistants because they can response like speaking with humans by using the feature of voice assistant or voice command.

The digital assistant is currently popular, such as Google Assistant, Alexa, Siri, and so on. This study will use Google Assistant which has a feature, namely a voice assistant that can answer questions or make a command according to the program that has been set by the developer. Based on that the researcher will use Google Voice Assistant (GVA) as the name for this application according to the feature that will be used in this study to easier explaining about this AI. Furthermore, Google Voice Assistant is based on natural language processing (NLP) so that can give responses or commands in natural languages. This chat feature can be used to practice speaking skills because you can be invited to communicate using your voice, even though the scope is not like that of a real human. Therefore, AI still can be useful to transform to achieve teaching and learning outcomes (Ayala-Pazmiño, 2023). This will be an alternative as a communication partner to practice speaking skills for those who are still embarrassed to communicate directly or have anxiety speaking in English. Speaking skills are important in communication but Speaking skills are difficult for EFL learners who are still not competent. Jaya et al.(2022), state that the problem of speaking that affected by anxiety, difficulty in comprehension, and linguistic problems that are caused by a lack of practice speaking. Haka et al.(2021), stated that the problem of speaking in vocational school even for freshmen and seniors with their perceptions are quite similar. Andas & Rutniatyanti (2020), That found problems speaking are caused by worry making mistakes, lack of ideas, low participation during speaking, less motivation, and conditions in the classroom. That is why speaking skills need more practice so that it can become a habit.

Therefore, the researchers found several studies to find out the effect of using AI applications, especially Google Assistant for learning activities. First, Tai & Chen (2020), researched the impact of using the google assistant application on EFL youth students. Next, Hadi & Junor (2022), by researching the use of devices to talk using Google Assistant to improve students' speaking skills. Kim et al.(2021), About the effect of chatbots on the communication skills of EFL students. Chen et al.(2020), also investigate the perceptions of EFL students on the use of Google Assistant for foreign languages. Hadi & Sanusi (2022), Study Teaching Pronunciation Using Google Assistant for Junior High School. Giffari et al.(2023),

Conducted research to explore Google Voice Assistant in EFL Classroom from Indonesian Voice teacher. N. & Kumar (2023), Study about EFL Learners' perception and problem on Google Assistant to assist English language learning. Lastly, Yang (2022), completed his research about teachers' perceptions of AI chatbots for English education.

Based on the preliminary study about AI especially Google Voice Assistant, it can be concluded that the use of AI especially Google Voice Assistant for learning English can be used in practicing English and has a good impact. However, it can be said that the research that has been done showed positive results but still lacks seeing the effect of Google Voice Assistant and compare with practice speaking with people (which means that practice speaking with their friends) that influence students to practice speaking skills for Vocational School. Therefore, the researcher wants to conduct research with this theory, but with a different setting context and a specific method to find out the effect of using Google Voice Assistant on grade 10 students speaking skills. This research will take place at SMK Negeri Bali Mandara because this case study will examine student responses at the school regarding the use of Google Voice Assistant as a technology-based AI in learning English, especially speaking ability to determine the effectiveness and the relationship between these variables.

## **1.2 Problem Identification**

Based on the explanation above about the several problems faced by students when learning English as a foreign language, especially for speaking. Therefore, the more explanation about the problem is as follows:

- a. The students felt embarrassed or shy and less interested in speaking in English
- b. The students hard to finding new vocabulary or even making a sentence in English and understanding the meaning
- c. The students also find it difficult to communicate in English fluently.

Based on the problem it can be concluded that the students feel embarrassed to speak in English which makes them less interested in English. This is

because students hard to find and understand the vocabulary to make sentences when speaking English, which also can impact their fluency in speaking English.

### **1.3 Research Limitation**

In this study, the researcher only focuses on the implementation of the AI Google Voice Assistants in English as a Foreign Language as a self-communication partner to know the effect on the students at grade 10 students SMK Negeri Bali Mandara, especially for speaking skills.

### **1.4 Research Question**

Based on the explanation above, there are several research problems stated by a researcher, as follows:

1. Is there any effect of using Google Voice Assistant on grade 10 students' speaking skills at SMK Negeri Bali Mandara?
2. What is the student's opinion of using Google Voice Assistant in English as a Foreign Language to practice speaking skills?

### **1.5 Research Objectives**

Based on the research problem stated, the purpose of this research is:

1. To investigate there is an effect of implementing Google Voice Assistant on students speaking skills.
2. To describe students' opinions on the implementation of Google Voice Assistant for practice speaking skills.

### **1.6 Research Significances**

The results of this research are expected to provide significant and useful information in terms of theoretical and practical, as follows:

Theoretically

The researcher expects that conducting this research will provide information and more knowledge about the use of Google Voice Assistant on student's speaking skills

## Practically

### 1. Teachers

This study aims to determine the relationship between chatbots in AI assistants and English-speaking skills so that teachers can develop these media to facilitate teaching and learning activities, especially for teaching speaking skills to students. With this research, teachers will also better understand how to use technology, especially chatbots in AI assistants to teach English to students in terms of speaking skills so that they can use it appropriately according to the learning objectives that will be given to students. Where Chatbots are widely used by students and even students but cannot be maximized in use for learning. Chatbots and AI are new ways to make it easier for teachers to implement learning for their students and from this, students are also expected to be able to learn more easily because these media are commonly used by students in their daily lives. Teachers will find it easier to find references to teach and variations in learning will become more diverse so that teachers can create a learning system that is not boring without reducing the purpose of the learning, especially in training students' English-speaking skills.

### 2. Students

This research aims to make students able to easily learn English by using a Google Voice Assistant to make it easier for students to train and practice their ability to learn English-speaking skills. It will also be able to create new ways for the students to learn English, especially speaking skills. This research is expected to change students' thinking about using Google Voice Assistant not only to assist activities with command but also for learning appropriately. These habits will make students more productive and active doing learning with themselves by utilizing surrounding technology such as Google Voice Assistant. Students learn to use Google Voice Assistant, especially to practice students English

speaking skills everywhere and every time even if there are no friends to practice it. All these aspects are in a context that focuses on speaking skills or other contexts in English, it is hoped that students can find and make it easier for them to use AI.

### 3. Readers

This research aims for all readers to be able to take advantage of technology in the modern era, especially chatbots in AI assistants to not only be used for searching something easier but can also be used as a medium for learning, especially learning English speaking skills. Readers are also expected to be wiser in using things around them, especially AI as one of the technological software that grew up now.

### 4. Other researchers

It is hoped that this study can be useful for other research to be developed and used as a reference. And also, so that it can be used to find sources of information that are relevant to the topic. This research is also expected to be used by researchers to develop the same topic with a different point of view so that this topic can produce different research but following the concepts and essences that have been made previously.

## 1.7 Key Terms

### 1. AI

#### a. Conceptual Definition

AI is software that can help human activities design programs computer the term AI was coined by John McCarthy in 1956 and he said that AI is the science or technique of making a program or computer-based application and also an intelligent tool to help human activities (Russel & Norvig, 2016).

#### b. Operational Definition

This research will use software AI or application-based NLP, a tool that can be used or help students practice English, especially

speaking skills during the learning process in the class or even out of the class as self-learning.

## **2. Speaking skills**

### **a. Conceptual Definition**

Speaking is a skill to say something fluently which aims to convey information in a language and not only in the form of knowledge (Nation & Newton, 2009). This means that speaking is how to speak up and deliver an idea with the sound of words verbally.

### **b. Operational Definition**

In this research speaking skills will be a dependent variable and the researcher will quantify the two groups of tenth-grade class in vocational high school.

## **3. Google Assistant**

### **a. Conceptual Definition**

Google Assistant is a software program developed by Google based on NLP is the type of AI that can respond to a command and it could be a digital personal assistant (Google, 2016)

### **b. Operational Definition**

The software or tool Google Assistant will be used in this research to give a treatment for the experimental group which is from tenth-grade students.

## **4. Vocational High School**

### **a. Conceptual Definition**

According to the Oxford Dictionary that explains Vocational School commonly known as a Vocational High School is a school that teaches vocational education or technical skills that are necessary for certain jobs.

### **b. Operational Definition**

In this research, the researcher will use tenth-grade students as the sample of the research. Some students will be used from two classes of tenth-grade students in that vocational high school.