

## CHAPTER I

### INTRODUCTION

This chapter discusses the research background, problem identification, research scope, research problems, research objectives, research significances, and definition key terms.

#### 1.1 Research Background

Since English has become an international language, people worldwide communicate with each other using English. Therefore, people need to be mastered English to help them deal with the international world. It has been stated by Ratminingsih & Budasi (2018) that proficiency in English is an essential skill for professionals in the tourism industry and other professions requiring their knowledge of English. However, language cannot be acquired completely without mastering all the skills in the language (Shegay et al., 2020). During the learning process of English, students must master four skills: listening, speaking, reading, and writing. Putri (2018) argues that writing skills are essential when learning English. Yulianti et al. (2019) have argued that the ability to write is also important in English studies. In addition, writing is a productive skill that EFL students must master to communicate through academic writing and writing (Toba et al., 2019).

Generally, writing is an activity to express something in written language. In line with this, Hidayati (2018) defines writing as a tool used to communicate through writing form. According to Purnamasari et al. (2021), learners can express their views in writing without engaging in direct dialogue. This means that students can communicate with others through writing without direct or verbal communication. More than that, the skills of students are needed in writing. This is because writing skills are a cognitive challenge that can help assess students' language competence, memory, and thinking skills (Javed et al., 2013). According to Lestari (2017), students are considered capable of writing if the aspects of writing are met, namely compiling an entire organization, paying attention to combinations between sentences to form a complete paragraph unit, and using appropriate vocabulary, grammar, and mechanics. This shows that writing is a complex skill. Moreover, Pahamzah et al. (2021) also pointed out that writing combines several language components, such as spelling, grammar, vocabulary, and punctuation.

In this case, one important aspect of the language to be mastered by pupils will enable them to acquire four language skills is vocabulary. Sulistyaningrum & Siswanto, (2019), emphasized that vocabulary is essential to language skills. As a result, vocabulary mastering aims to develop students' language skills (Santoso & Andriyadi, 2019). In addition, mastery of vocabulary is one of the ways for students to succeed in writing paragraphs in English. The vocabulary refers to the English words that students use to express their ideas in their writing (Hidayati, 2018). Therefore, vocabulary is fundamental in writing sentence by sentence to

form a paragraph in good English. Susanto (2017) and Bai (2018) emphasized that vocabulary is the basis for making sentences by reflecting on many vocabularies mastered so that writers can describe their thoughts. Therefore, emphasizing vocabulary at the beginning can help students to acquire writing skills and achieve competence in writing.

However, Alsubaie & Madini (2018) stated that students often lack the necessary vocabulary and writing skills to write texts and paragraphs. Moreover, Hidayati (2018) found that two factors become challenges for teachers in teaching writing, namely internal and external factors. Furthermore, she indicated that internal elements such as native language interference (Indonesian language), English competency (grammar knowledge and vocabulary mastery), motivation, and reading habits are the more prominent factors in students. In addition, Sakkir (2020) revealed that students have many ideas but are worried about starting and even developing their ideas into writing. Therefore, students must be competent in making sentences and have a good vocabulary (Sulaiman, 2017). In this case, teachers play a vital role in helping students achieve their writing competence. The teachers can use an approach to teaching writing by considering several things, such as making students aware that writing is essential, assessing how students feel and their writing experience and teachers can provide tools and information to students (Miller et al., 2018). Besides, the teachers must also be able to develop appropriate learning media. Puspitarini and Hanif (2019) proved that effective educational objectives can be achieved by appropriately using education media in a teaching process.

Technology has a key role to play in 21st-century teaching and learning. In this case, using technology in learning is an effective way for teachers to develop learning media in the classroom. It is supported by Puspitasari et al. (2018) stated that in 21st-century learning, the use of media is closely related to information technology as a material for developing learning media and refers to students' critical thinking. Hadijah et al. (2020) added that teachers should use learning media integrated with technology to facilitate students in learning language and language skills in the context of learning English. Hence, media use can be a liaison in transferring the teacher's concept of the material taught to students (Wirawan, 2020). Additionally, involving technology as a learning medium is the right alternative, especially when today's students are already proficient in using technology compared with students in the past. The teachers must choose the right learning media for teaching students because each learning media has different characteristics (Mansur & Utama, 2021). Moreover, teachers must also be able to use any existing media, whether conventional or interactive (Fathan & Syafii, 2018). Thus, using the right learning media in the learning process can support achieving the learning objectives the teacher expects.

Based on the results of preliminary observations conducted at SMPN 1 Singaraja in class VIII, it was found that the learning process for grade eight was taught using conventional learning media. The learning media used were textbooks for eighth-grade students and other supporting media in the form of whiteboards. Besides, the teacher also used technology-based media, namely YouTube videos, for teaching students in class. However, the students were not

motivated to participate in the class. Furthermore, the teacher has given students direct instructions regarding teaching them to write according to the material provided during learning activities. In this case, the teacher directly explains the material taught in front of the class. Then, the teacher asked the students to write and correct the sentences on the whiteboard together. Students were also asked to write a paragraph with examples from the textbook by their teacher. However, from these activities, it can be seen that students still lacked vocabulary and writing skills. In addition, students quickly feel bored following the lesson. It could be seen in the students' attitudes and behaviour. To foster students' motivation to study the English language, especially in written work, a teacher must be capable of resolving these problems using suitable and entertaining educational media.

Related to the problem, some media that the teacher can use in teaching the students, especially junior high school students, are Duolingo, Quizizz, Kahoot!, FlipQuiz, Babbel applications, and so on. One application that can be used concerning students' vocabulary mastery and writing competence is Duolingo. Duolingo is an online language learning platform created for free to learn various languages worldwide (Duolingo, 2016). The use of this platform is specifically for the features provided, namely Duolingo for schools. Students can access this platform by using the Duolingo website or application. Additionally, students will feel like playing a game in learning English using Duolingo as a learning medium (Duolingo about us: approach, 2021).



In this case, Duolingo can be seen as gamification learning. Redjeki & Muhadjir (2021) argued that gamification is a term to describe game-based learning that can be used to increase knowledge of English. Besides, Kapp (2012) states that gamification involves individuals, motivates students, encourages learning, and can solve problems through game-based learning. On the other hand, Waluyo & Bucol (2021) revealed that gamification in learning English has changed how to learn vocabulary. They further explained that learning vocabulary in English is sometimes boring because you have to memorize and repeat, which later these words are acquired and used in productive skills such as writing. Therefore, applying gamification in learning English in the classroom can help students master vocabulary and improve students' writing skills in a fun way.

Hereafter, previous studies that used Duolingo to determine its effect on vocabulary mastery were examined by several experts. Kusumadewi (2018) examined the impact of Duolingo on students' vocabulary mastery. The purpose of this study was to find out how Duolingo would affect the vocabulary mastery of students. This study used a simple random sampling technique in the eighth grade. The sample consisted of 30 experimental groups and 30 control groups. The design used is a true-experimental research design with post-test-only control. The result significantly affects the mastery of English vocabulary among students taught using the Duolingo android application as a medium. Irawan et al. (2020) also researched Duolingo in English Vocabulary Learning. The purpose of this study was to analyze the effect of implementing the Duolingo mobile application in English vocabulary. The sample in this study used non-random sampling

consisting of 5 English teachers at SDN 02 Ciputat and 5 IT experts. The method used is quantitative, with hypothesis testing using Software Quality Assurance (SQA) techniques. This study indicates that Duolingo mobile, application-based learning media can improve students' vocabulary mastery.

In addition, the use of Duolingo also affects skills in language learning. Purwanto et al. (2022) proved that in their research on the effectiveness of Duolingo and SPADA on the students' listening learning. This study aimed to examine the differences in student performance using English listening teaching media, namely Duolingo and SPADA. The sample of this study is listening class 2A PGRI University Semarang, which consists of 52 students. This research design is experimental research design with a 2x2 factorial. The study proves that Duolingo and SPADA teaching media are effective in listening learning for students with high and low achievement. Besides, Alfuhaid (2021) conducted a study on using Duolingo to improve speaking skills. This research aimed to determine the efficacy of utilizing Duolingo to improve students' speaking skills in an EFL lesson. The participants in this research were 28 male students, divided into 14 students for the experimental group and 14 for the control group. This study uses an experimental design. The study indicates that the use of Duolingo positively impacts students' speaking and overall language skills. However, research on Duolingo to determine its effect on students' writing skills is very rare.

Based on the results of the previous research above, two studies discuss the effectiveness of Duolingo on students' vocabulary mastery. In addition, two other studies revealed the effectiveness of Duolingo on listening and speaking. The

current study is similar to previous research using Duolingo. Meanwhile, the differences are in the sample, research design, and research results. In addition, research on using Duolingo to determine its effectiveness on writing competence is still limited. Therefore, the researcher is interested in conducting further research, especially regarding vocabulary mastery and writing competence for students who are taught using Duolingo. Thus, this study aims to determine the effect of Duolingo on students' vocabulary mastery and writing competence.

## **1.2 Problem Identification**

Seeing the importance of using appropriate learning media for learning English, teachers must be able to use it whether it is conventional or up-to-date. Based on the background of this research, it can be seen that there is still a lack of variety in teaching, such as the use of learning media. This is evidenced by preliminary observations that students are taught to use conventional learning media in textbooks for class VIII students and other media in the form of whiteboards. In addition, YouTube is also used as a learning medium in class. Although the teacher used the media well, it did not motivate the students to learn. In addition, in writing activities, the students are taught through direct instruction by the teacher. They were asked to write sentences on the whiteboard. They were also asked to write a text with examples from the textbook. From observing these activities, the students have difficulty writing text due to lacking vocabulary and writing skills. Thus, various media are needed to support the students learning in writing.



### **1.3 Research Scope**

The scope of this study was limited to eighth-grade students at SMP Negeri 1 Singaraja. The study wanted to see if Duolingo significantly affected students' vocabulary mastery and writing competence.

### **1.4 Research Problems**

Based on the background of this study, the research problems are formulated as follows.

- 1) Is there any simultaneously significant effect of Duolingo toward students' vocabulary mastery and writing competence of the eighth-grade students?
- 2) Is there any significant effect of Duolingo toward students' vocabulary mastery of the eighth-grade students?
- 3) Is there any significant effect of Duolingo toward students' writing competence of the eighth-grade students?

### **1.5 Research Purposes**

Relating to the research problems that had been mentioned on the previous section, this study was purposed to;

- 1) Examine whether there is a significant effect of Duolingo on eighth-grade students' vocabulary mastery and writing competence.
- 2) Examine whether there is a significant effect of Duolingo on eight-grade students' vocabulary mastery.
- 3) Examine whether there is a significant effect of Duolingo on eighth-grade students' writing competence.

## **1.6 Research Significances**

This research was intended in providing theoretical and practical significances. The theoretical and practical significance of this research were described as follows:

### **1.6.1 Theoretical Significance**

The result of this study was intended in giving benefits for educational development, particularly on the use of Duolingo in improving the eighth-grade students' vocabulary mastery and writing competence.

### **1.6.2 Practical Significance**

The result of this study was intended in showing a practical contribution and inspiring many parties; students, teachers, and other researchers.

- 1) For Students

This research was predictable to stimulate and motivate students to write, improve their vocabulary when learning English, and improve their writing competence.

2) For Teachers

This research aimed to help teachers use appropriate and innovative media to teach English, especially writing.

3) For Researchers

This study is contributed as a reference for a relevant topic research conducted by further researchers.

## **1.7 Key Terms Definition**

### **1.7.1 Conceptual Definition of Dependent Variable**

#### **1. Vocabulary Mastery**

The term vocabulary is used to describe how many words are necessary in order to communicate ideas and convey the meaning of a speaker (Elmadi & Hezam, 2020). Vocabulary mastery means one's expertise in defining and using each word correctly in a sentence (Baptis, 2018). Vocabulary consists of two types, namely receptive vocabulary and productive vocabulary (Hact & Brown, 1995). In addition, vocabulary has three aspects that can be tested to determine the extent to which students master vocabulary, namely form, meaning, and use.

#### **2. Writing Competence**

Competence is the ability of a person to apply his knowledge, skills and qualifications in order to achieve optimum results under defined criteria (Suanyot et al., 2002). Writing competence is a writing skill that reflects the writer's knowledge of thinking, acting, and feeling expressed in a piece of writing (Ratminingsih et al., 2018). Students' writing competence can be determined by assessing aspects of writing competence, including rhetoric, grammar, vocabulary, clarity of meaning, and relationships among ideas (Jacob, cited in Zidan, 2020).

### **1.7.2 Operational Definition of Dependent Variable**

#### **1. Vocabulary Mastery**

The students of 8 grade in SMPN 1 Singaraja must master vocabulary as part of their language learning. In this case, vocabulary mastery can be seen from students being able to use and master more vocabulary after they use Duolingo inside and outside the classroom. In this case, their vocabulary mastery reflects aspects of the form, meaning, and use of vocabulary. These aspects were assessed to determine vocabulary mastery in the experimental and control groups based on material from class VIII semester 2 students, namely recount text. Furthermore, their vocabulary mastery was seen from the results of the vocabulary test as a post-test after being taught using the Duolingo learning media. Besides, students' vocabulary mastery was also seen in other classes by giving a vocabulary test as a post-test after being taught using conventional media.

#### **2. Writing Competence**

Writing competence reflects the results of the 8 grade students of SMPN 1 Singaraja, which was assessed through the final results of their writing. In this case, the experimental and control classes were taught with the same material based on the eighth-grade English syllabus of SMP Negeri 1 Singaraja in the second semester. The material is recount text. Then, the two classes were through four writing steps: planning, drafting, editing, and final drafting. Duolingo was used as a medium in the experimental class. Meanwhile, the control class was taught using conventional media. The students were taught vocabulary first before teaching writing. In this case, students' writing competence was seen from the students' skill to write recount paragraphs based on the aspects of writing paragraphs that have been determined. The aspects used in assessing students' writing competence are content, organization, vocabulary, grammar, and mechanical skills. The final result was known by comparing the mean score in each class.

### **1.7.3 The Conceptual Definition of Independent Variable**

In this study, Duolingo is an independent variable. Duolingo is an online language learning platform created for free to learn various languages worldwide (Duolingo, 2016). Additionally, A game-based educational tool named Duolingo can be used in the classroom. Furthermore, Shortt et al. (2021) revealed that the Duolingo lesson system is based on specific topics such as family, food, and travel, focusing on introducing new vocabulary and practicing. Duolingo offers



activities with different skills, such as pronunciation, translation, recognizing words based on pictures, writing down what students hear, etc. (Munday, 2016). The activities like that will make the students enjoy learning English, moreover packed with learning like playing games. Thus, using Duolingo as a learning medium can increase students' motivation and learning outcomes in English.

#### **1.7.4 The Operational Definition of Independent Variable**

In this study, Duolingo is an independent variable. Duolingo was used as a learning medium to teach students in experiment classes. In this case, Duolingo was used at the beginning of lessons in and outside the classroom. Previously, students were asked to create an account and log in using the application via their smartphone. Afterward, they were given a class code to join Duolingo for schools. They used Duolingo with several features such as points, leaderboards, gold, checkpoints, encouragement, lingots, streak, fluency score, and trophies. In addition, Duolingo has several exercises in each unit covering translation, matching, pairing, listening, speaking, reading, and writing exercises. In this situation, students were assigned to practice several questions with a 100-point target in one day. The teacher can find out their progress through Duolingo for schools. Furthermore, as a consequence of the post-test in the experimental class, the effect of Duolingo on students' vocabulary mastery and writing competence could be shown at the end. Then, the use of Duolingo in the

experimental class was compared with the post-test results from the control class, which received different treatments, by comparing the means of the two classes.

