

# CHAPTER I

## INTRODUCTION

This chapter discusses the introduction of the research study, the background of the study, the problem identification of the study, the limitation of the problem, the research objective of the study, the purpose of the study, and the significance of the study.

### **1.1 Background of the study**

The era of the industrial revolution 4.0 is famous for technological advances which have changed the state of the world and have become the basis of human life (Kemenristekditi, 2018). Many impacts in various aspects of human life have occurred in this era of globalization, one of which is the demand for education. According to Zubaidah (2016), literacy has an important role in the current era of globalization. The literacy in question is the ability to write and read, which is basic literacy and is the main foundation to be equipped in life in the 21st-century era. One of the real challenges in the 21st century, especially in the education system, is that education should produce human resources with complete competencies known as 21st-century competencies.

There are three main skills in the 21st-century educational framework, according to Trilling & Fadel (2009), namely (1) career and life skills, which are indicated by several indicators, namely flexibility and adaptability, initiative and self-regulation, social interaction and inter-culture, productivity

and accountability, leadership and responsibility, (2) digital, technology, media, and literacy skills, which involve skills to use technology, media, and literacy skills, (3) learning and innovation skills concerning the 4 Cs, namely collaboration, communication, creativity, and critical thinking. So, a new paradigm emerges that learning is expected to lead to the realm of meaningful learning and promote deep learning, in which we not only learn to know but to believe in the meaning of what we need.

One of the important roles is an adequate understanding of literacy, which makes it easier for students to improve skills in the 21st century, namely collaboration. Students can collaborate with other students from other regions or countries, compete, be creative, and develop high-order thinking. Developing English literacy is the first step so that other 21st-century skills can be well developed, and it is an important capital in the development of the golden generation. The current generation is mentioned as a digital native, an age that is used to living surrounded by technology as a tool in their life activities (Juliane et al., 2017). Today's technology is part of children's lives in this era that cannot be separated from children's daily activities (Uhls, 2015).

Therefore, in the process of learning English in the 21st century, it is very important to implement the use of technology, information, and communication. In this case, the internet is important to help students get information from various sources needed as learning material. This can increase students' independence in collecting data, curiosity, and creativity.

However, learning English in schools is still using conventional methods. Teachers still teach by relying on textbooks without being assisted by other media. This will make students feel bored in learning, and also, the learning process is a teacher center where only communication occurs from teacher to student. Children will absorb information more quickly in this era of learning, packaging can be done creatively and innovatively. Therefore, there is a need for innovations by developing an English learning model following the industrial revolution, namely using technology.

The development of technology, information, and communication has many impacts. One of them is developments in the games industry, and educators are increasingly creative in designing games to be used in the learning process (Jusuf, 2016). According to Lee & Hammer (2011), games can provide three psychological benefits: cognitive, emotional, and social. Therefore, learning using games can motivate students to learn. Because, in general, students do not like to do daily work for too long, but to play games, students are willing to spend their time. Then came the idea to combine learning in a game.

In Indonesia, the learning method used is still using the conventional way. So not many schools use digital game media as learning media. If digital games are used properly, they will have many positive impacts, such as contextual learning in language learning, providing opportunities for students to learn independently, and giving them challenges to solve on their own (Mahayanti & Utami, 2017).

Gamification is one of the most widely known learning methods. In education, gamification has a positive impact, namely that students become motivated to learn and become more enjoyable and interested in the learning process (Hamari et al., 2014). Gamification is the application of game design elements in a non-game context (Kristiadi & Mustofa, 2017). The use of games does not only refer to the fictitious world but can be made according to the contextual learning material. The concept applied to gamification is to design games using learning materials. By using gamification as a learning model, it can be concluded that the characteristics of this learning model are challenges, rewards, and competitions, and other elements include the 4C competencies needed in this 4.0 revolution era.

Learning media used in learning are still very limited in this 4.0 revolution era; currently, they are still widely found in Bali, especially in the Buleleng district. The fact that as many as 96% of students in an elementary school in Buleleng have gadgets that are used to play digital games is stated in the research (Mahayanti & Utami 2017). However, the game is just a game that makes them happy and does not contain learning content according to the applicable curriculum. With this, the teacher responds positively to developing digital games that can help students learn English quickly and with fun.

With this phenomenon and potential, this research aims to develop a website game for elementary school students to help them learn English in this 4.0 revolution era. With the development of this game, it is hoped that it will facilitate digital natives to learn English more fun.

## 1.2 Problem Identification

In Indonesia, most of the teaching methods used are still using conventional methods. Teachers still rely on textbooks and syllabus without any other media help. This will make the children feel bored and make students inactive in the classroom. And the learning media used in the 4.0 revolution era is still very limited and can be said to be ancient. Based on the background of the research above, there are two problems identified:

1. The use of technology based learning media is not optimal in the learning process.
2. Learning media are still limited in the current 4.0 revolution era.

## 1.3 Problem Limitation of the Study

As explained in problem identification, the researcher also limits the research that can be made. The study focuses on developing and implementing gamification in learning English for the 4th grade in the first semester. The development will use the design and development (D&D) methodology and ADDIE (Analysis, Design, Development, Implementation, Evaluation) model. And the implementation will be carried out for the 4<sup>th</sup> grade in the first semester.

## 1.4 Research Objective

The following is the research objective based on the explanation of the background above, as follows:

1. How to develop a website game for learning English for elementary school students?

### **1.5 Purpose of the Study**

The following are the purpose of this study based on the research question above follows:

1. To identify the process of developing a website game for elementary school students learning English.

### **1.6 Significance of the Study**

#### **1.1.1 Theoretical Significant**

This research is expected to provide information about the game's development in learning English for elementary school students in the Industrial Revolution Era 4.0.

#### **1.1.2 Practical Significant**

##### **a. For students**

This research is expected to provide meaningful learning and a pleasant experience. Therefore, students can be motivated to learn because they can learn using books and games.

##### **b. For Teacher**

This research is expected to help English teachers create a pleasant classroom atmosphere. And provide an overview of the development and implementation of a game in the classroom as a learning media.

### c. For other Researcher

This research is expected to be a reference that has the function of helping other researchers when conducting research related to the development of website games in the learning process.

## 1.7 Definition of Key Terms

In this section, the researcher describes key important terms to provide guidelines for conducting research. There are 2 kinds of key terms. Namely conceptual definitions and operational definitions. For an explanation related to the conceptual and operational definition, it is explained below:

### 1.9.1 Conceptual definition

A conceptual definition can be experts' statements related to the theories presented in this research. Several theories were used in this study, as follows:

#### a. Learning in Industrial Revolution 4.0

According to Putriani & Hudaidah (2021), learning in the 4.0 revolution era has several main focuses that need to be developed, namely, learning must be student-centered, students must be active in class, students must be able to develop 4C skills (collaboration, critical thinking, creativity, and communication).

**a. Gamification as the Learning Media**

Gamification is a learning medium that can motivate students in the learning process (Jusuf, 2016). According to Fadilla & Nurfadhilah (2022), gamification has several elements: points, badges, levels, and challenges.

**b. Teaching English for Young Learners**

According to Meriyati, M., & Pd (2020), children aged 6-12 are young learners included in the elementary school education level. Children have characteristics that they still like to play with and very quickly understand something by seeing, listening, and touching (Garton & Copland, 2018).

**1.9.2 Operational definition**

The operational definition is very important to assist researchers in conducting appropriate research.

**a. Learning in Industrial Revolution 4.0**

In the industrial revolution 4.0, learning using technology was very important to improve the quality of learning. One of the technologies that can be used is digital games. In this study, learning media in the form of website games was developed to assist students in developing skills using technology.

**b. Gamification as the Learning Media**



Gamification can be used as a learning medium in games to increase student motivation in learning. This study developed the game based on the teaching module and several gamification elements: points, badges, levels, and challenges.

### **c. Teaching English for Young Learners**

Young learners are children aged 6-12 years who have characteristics that still like to play. Children are also easily bored, especially when in the learning process. Therefore, this research will develop learning media in the form of games for 4th-grade elementary school children so that they are more happy and comfortable with learning.

