

CHAPTER I

BACKGROUND

1.1 Background of the Study

Now the world has entered the era of the industrial revolution 4.0, where technology has become the main point in human life. According to Schwab (2017), the Era of the Industrial Revolution 4.0 was marked by a combination of global technologies, such as physical, digital, and biological (Angelianawati, 2019). In the Era of the Industrial Revolution 4.0, humans are required to be able to work and have the ability to be creative, have teamwork skills, work enthusiasm, collaborate, and adapting cultural differences (Panprase, 2018). It is very important to increase human resources to face the era of the industrial revolution 4.0. Human resources can be improved by updating the education system to the aspects needed in this era (Lase, 2019).

A good education system is an education system that can improve the quality of human resources. In 21st-century learning, literacy plays a very important role (Zubaidah, 2016). Basic literacy that shapes students' reading and writing skills is the foundation for understanding literacy and other abilities in the 21st century. Shortly, 21st-century learning must be student-centered, contextual, collaborative, and integrated with society (Zubaidah, 2016). A good learning system will help students master several skills in the 21st century. Some skills that must be learned by humans, as stated by Triling & Fadel (2009): (1) career & life skills (indicated by the ability of flexibility, adaptation, initiative, leadership, social/intercultural interaction, and responsibility), (2) digital, media technology, literacy skills

(indicated by technological knowledge and literacy skills), (3) learning and innovation skills (Lase, 2019). The third skill concerns 4C: creative thinking, critical thinking and problem-solving, communication, and collaboration (Septikasari & Frasandy, 2018).

Technology-based learning is needed to develop students' communicative abilities and promote learning autonomy (Lubis, 2018). The use of ICT encourages students and teachers to find, create and communicate information that includes knowledge, skills, and behavior by using technology (Sari et al., 2020). In teaching English, technology has a positive influence on students and also has a very important role in teaching. Technology can help teachers or students by providing various information and sources of learning materials, increasing student enthusiasm for learning, and improving student's English communication skills (Sari et al., 2020). In addition, using technology in teaching English will help students and teachers broaden their knowledge about foreign cultures. So, technology is considered a good teaching tool or learning media for students, especially in learning English.

In reality, several schools in Indonesia still use the conventional method of teaching English. Teaching English is still based on textbooks, but sometimes it's combined with PowerPoint. A monotonous learning atmosphere will cause boredom, and students need to be motivated when participating in learning. Boredom will certainly lead to laziness in students, so students will become lazy to gain new knowledge about language. Also, students need to improve their thinking skills in solving problems in language learning. Likewise, with student motivation, according to (Siregar & Siregar, 2020), motivation affects the success and failure

of students in the learning process. The combination of the education system and the use of technology will create creative and innovative learning. Therefore, the development of technology-based learning media is very positive for teaching, especially learning English.

Learning in the 21st century is currently influenced by information and communication technology or ICT developments. There have been many developments in technology-based learning media, including a digital game-based learning method. Digital game-based learning media makes teachers more creative and innovative in designing teaching and learning activities (Heni, 2016). Games as effective learning media are believed to increase student learning enthusiasm and motivation to participate in learning (Mahayanti et al., 2017). Using games as a learning medium is suitable for young learners or students at the elementary school level. It is very important for young learners in teaching English to find good teaching methods. Thus, students will be enthusiastic about participating in learning and have good knowledge of English from an early age. According to research by Lee & Harmer (2011), games can provide 3 psychological benefits consisting of cognitive, emotional, and social so games can motivate students to participate in learning (Heni, 2016).

Game-based learning methods have a very positive impact used as English learning media. The game-based learning method is known as gamification. According to Su & Cheng (2015), gamification uses game design elements and game mechanics in non-game contexts to engage someone and solve problems (Redjeki & Muhajir, 2021). Gamification can encourage students' motivation to participate in English learning because gamification provides innovative and

interesting learning. In addition, gamification as a learning method can also involve and make students play an active role in the learning process (Dehghanzadeh et al., 2021). The use of gamification in learning English causes learning to be more constructive, can develop students' skills, and is a problem-based learning method. The learning method using gamification is a model that includes the 4C abilities needed in this 4.0 revolution era.

The game-based learning method is very positive to be used as a medium for English learning. Gamification is known as one of the game-based methods. According to Su & Cheng (2015), gamification uses game design elements and mechanics in non-game contexts to engage students and solve problems (Redjeki & Muhajir, 2021). Gamification can encourage students' motivation to participate in English learning because gamification provides innovative and interesting learning. In addition, gamification as a learning method can also involve and make students play an active role in the learning process (Dehghanzadeh et al., 2021). The use of gamification in English learning causes learning to be more constructive, can develop students' skills, and is a problem-based learning method. The learning method using gamification is a model that includes the 4C skills needed in this 4.0 revolution era.

In Indonesia, even in teaching English as a second language, many schools still use conventional methods, one of which is in Bali. Several schools in Bali have minimal use of technology as a learning medium. This problem is due to the limited technology-based facilities provided by schools. Even though in this 4.0 revolution era, students have considered technology as their "friend" in everyday life. Therefore, the awareness of English teachers in using technology in learning still

needs to be improved. Elementary schools are the first level in receiving English learning and are also minimal in using learning methods that are attractive to students. The Elementary School level is the right time to strengthen the foundation of their knowledge regarding learning English.

The writer has observed SD Negeri 1 Astina, Singaraja, as one of the schools in Buleleng Regency, Bali, namely SD Negeri 1 Astina, Singaraja. Thus, the researchers chose this school as the object of development research in developing a gamification teaching model because both teacher and students are used to using technology. But it found that the technology used in this school is limited in chromebook form. Also, this school has an independent English teacher because not all elementary schools have an independent English teacher.

The subject of this study is 5th-grade elementary school students. 5th-grade elementary school students were selected in this study because several researchers also carried out research in this school. The 5th grade was chosen to look for differences in product content developed between other researchers. In addition, the 5th grade was chosen to prove whether this product can have a good effect and be accepted by students. In addition, improving this class's learning quality is essential because they will be approaching the school graduation exam period. So, it is necessary to strengthen knowledge of English using engaging learning media for students.

In the results of observations, the researchers found several problems related to teaching English at school. The applied learning method still uses conventional teaching methods and minimal use of technology as a learning medium. Students

in this school consider English a difficult subject for them to master. Also, students tend to feel embarrassed when giving answers in learning because they fear being laughed at. In addition, the monotonous learning method used in this school makes students feel bored and lazy in English learning

The gamification that will be developed in this school is a website-based digital game. This development research aims to help educators and teachers to find fun learning methods for students. The students can access this game on their smartphones and Personal Computers (PCs). In addition, the development of gamification methods is also expected to help students and teachers create a fun learning atmosphere.

1.2 Identification of the Problem

Based on the background and results of observations obtained, students at this school consider English to be one of the most difficult subjects for them to master. Students tend to feel embarrassed and afraid when giving answers in following lessons because of their lack of self-confidence. In addition, the monotonous learning method makes students feel bored and lazy in taking lessons. Then the use of technology as a learning medium in this school still needs to be improved.

Technology is a student's friend because many students already use personal smartphones. They are already familiar with the usage of smartphone in their daily life. However, according to the data observation, the teacher rarely used technology in conducting the learning activities. Therefore, this situation leads to the boredom for the student in English learning. It happens because they have less

motivation because of monotonous learning activity. It can be concluded; the learning activity will be more interactive and interesting for students if technology (smartphones and PCs) is combined in learning.

Furthermore, this research will develop game-based learning media, namely website-based digital games. This research will involve grade 5 students at SD Negeri 1 Astina Singaraja. The material contained in this game is adapted to the English syllabus for class V, especially in semester 1. This school was chosen because it met predetermined criteria, namely having an independent English teacher, and the school has used several technologies in its teaching. In addition, this school is located near urban areas, so many students are fluent in using technology.

1.3 Limitation of The Problem

This research focuses on developing gamification learning media in English learning for 5th grade in semester 1 at SD Negeri 1 Astina, Singaraja. This study used the Design and Development (D&D) research method. The development model used is the ADDIE development model (*Analysis, Design, Development, Implementation, and Evaluation*). This research is based on conditions where technology has become a basic human life requirement in all fields. Thus, the education system must adapt to technology because students are fluent in the use of technology, and educators must be able to keep up with the times.

1.4 Research Questions

Based on the background above, the formulation of the problem in this study is as follows:

1. How is the process of developing gamification for 5th-grade in 1st-semester elementary school students in learning English?
2. What is the quality and the effectiveness of the website game-based learning English media for 5th grade students in the first semester?

1.5 Research Objectives

Based on the research question above, the objectives of this research are as follows:

1. To identify the gamification development process for elementary school students learning English.
2. To identify the effect of the gamification application for 5th-grade elementary schools in increasing student enthusiasm and motivation in learning.

1.6 Research Significances

Significant in this research will be explained theoretically and practically with the following description:

1. Theoretically

This research is expected to provide additional knowledge and an overview of the effectiveness of gamification applications for elementary students in learning English in the era of the industrial revolution 4.0.

The results of this study will be helpful for readers, students, and teachers, especially English teachers, in creating innovative and creative learning methods.

2. Practically

In practice, the results of this study are expected to provide benefits as described below:

- a. For students, this research can be used as a solution to find fun learning media; one of them is the gamification method which can motivate students' enthusiasm in English Learning
- b. For teachers, this research can provide benefits for using learning methods that are fun for students and inspire teachers to design creative and innovative learning media for students.
- c. For researchers, the results of this research are expected to be one of the resources the other researchers to conduct similar research.

1.7 Expected Product Specification

The product development in this research is in the form of gamification-based learning media following the English language learning material for 5th grade elementary school. Some brief descriptions of the learning media developed are as follows:

1. The product that will be developed will present several materials and English practice questions that are packaged as exciting games for elementary school students.
2. Learning media can be accessed using a smartphone and Personal Computer

3. This gamification learning media contains material on the 5th-grade elementary school syllabus, especially in the 1st semester.
4. This gamification learning media combines elements of pictures, quizzes, and examples of practice questions that can broaden students' knowledge and enthusiasm in learning

1.8 Development Assumptions and Limitation

The development of this gamification learning media is based on several assumptions which are explained as follows:

1. Gamification learning media is designed as attractive as possible to increase students' motivation in learning English.
2. Gamification of learning media can help teachers, especially 5th-grade elementary school teachers, to provide exciting learning media for students and new for students.
3. The development of gamification media is expected to be able to assist students in understanding the existing material.

The limitations of the development of gamification learning media are as follows:

1. The gamification learning media developed is only limited to the 5th-semester 1st grade English material.
2. The gamification learning media developed is based on an analysis of 5th grade SD Negeri 1 Astina, Singaraja's needs for the 2022/2023 academic year. The learning media is limited to field conditions.

1.9 Definition of Key Term

In this section, important terms are explained as guidelines for conducting research. There are two kinds of key terms, namely conceptual definitions and operational definitions. The following is an explanation of these two concepts:

1.9.1 Conceptual Definition

A conceptual definition can be a statement from experts regarding a theory. This study uses several theories which will be explained as follows:

1. Education in the Industrial Revolutionary Era 4.0

According to Rachmadtullah et al., 2020, learning in the 4.0 industrial revolution era is expected to provide opportunities for students to be creative, collaborate, think critically, solve problems and optimize their literacy and numeracy skills.

2. Teaching English for Young Learners

According to McLaughlin (1978), children have greater potential in learning foreign languages. This is because children tend to learn a new language faster than adults (Moto et al., 2021).

3. Gamification

Nick Pelling (2011) describes gamification as a process of changing face-to-face learning into online learning that is more fun in the context of games and emphasizes the use of game elements (as cited by Spanellis & Macbryde, 2016). Gamification can increase student motivation during the learning process (Tan, 2018).

1.9.2 Operational Definition

1. Education in the Industrial Revolution Era 4.0

Education in the Industrial Revolution Era 4.0 is a response where humans and technology can collaborate creatively and innovatively. Collaborative learning with technology will make it easier for teachers and students to find learning information from various parts of the world.

2. Teaching English for Young Learners

Young learners are students in the age range of 7-12 years. Where this age is the golden age in accepting all learning, one of which is learning a foreign language.

3. Gamification

Gamification is a learning approach that uses game or video game elements to motivate students' enthusiasm for learning. In addition, game-based learning can make students feel challenged in working on problems. Games can also help students change negative feelings in participating in learning into positive feelings.