

CHAPTER I

INTRODUCTION

1.1 Research Background

Reading literacy has been constituted as a fundamental objective of education. In many schools, reading literacy is positioned as a compulsory subject for students Wildová, (2014). Delgadova, (2015); Sample, (2020) define reading literacy as a comprehensive set of reading skills and abilities required for students to work with texts effectively and comprehend and interpret the contents properly, both explicitly and implicitly. It is added that reading literacy also becomes an intensive focus starting from the elementary level until the tertiary level Ratminingsih et al., (2020). Children's reading literacy is promoted earlier since it has a major impact on their critical thinking and how they understand the world Prawira et al., (2023). As a matter of fact, reading literacy has been a major concern in Indonesia, where students' reading is emphasized intensively from the elementary level due to its significance.

Despite its significance, reading literacy has become a global issue requiring serious attention from Indonesian educators and stakeholders. A program of International Students Assessment (PISA) and Progress in International Reading Literacy Study presents that there are several countries with a low level of reading literacy, including Indonesia (Wijayanti, 2020). Periodically, the assessment categorizes Indonesia as a country that has a low

level of reading literacy, and there is no significant improvement each year Bilad et al., (2024); Solihin et al., (2024). A study reveals that low reading literacy in Indonesia is related to the lack of students' ability to describe the contents, in which the students tend to read a text without knowing the contents Madu & Jediut, (2023). It is also discovered that students perform poor reading literacy when they read English text, influenced by a lack of English exposure, considering that they habitually read text in their first language (Butarbutar, 2022). The different access to reading material between urban areas and rural areas affects the gap in collecting the sources of reading literacy, as urban areas are easier to access the sources of reading material than rural areas Nadifa & Zulvani, (2024); Nasrullah et al., (2024); S. M. Sari & Manurung, (2023). Additionally, the effect of Covid-19 has a significant influence to decrease the students' learning motivation, that worsen the process of learning in the classroom (Pitri & Sofia, 2022; Wijayanti, 2020). These are issues for Indonesian education, indicating that the quality of reading literacy is delicate.

Considering these challenges, reading literacy has been emphasized started in the early stage of schools, particularly at the primary school level. In Indonesia, early reading literacy development has been regarded as a strong foundation for students to acquire higher critical thinking skills in reading Zaim & Zakiyah, (2024). The students are introduced to the activity of identifying main ideas, interpreting implicit information, making inferences, and critically reflecting on texts Khofifah & Ramadan, (2021). These activities are essential to build students' competencies that are often assessed in international assessments such as PISA

(OECD, 2023). In this case, primary schools represents a critical stage to establish lifelong literacy habits and prevent persistent rreading difficulties in the future educational stage (Ehret & Rowsell, 2021; Novela et al., 2022).

However, the relevant problem related students' reading literacy still becomes a major issue in primary schools. A preliminary observation is conducted at SDN 4 Sanur to find out the current condition related to students' reading literacy in English classrooms. It is found that the fifth-grade students have fairly good abilities in reading skills and reading comprehension in English, compared to the students from grades 1 to 4, who need more practice to improve their reading skills and English vocabulary. However, most of them still face difficulty in identifying the main ideas and interpreting implicit information in a text. It shows that their reading literacy is still low. Based on the preliminary observation, it reflects a similar issue to the Indonesian current phenomenon, where the students are struggling to construct meaning from the text. It also shows that the students' reading literacy has not been supporting literacy goals emphasized in the Merdeka curriculum, where the students are expected to be able to comprehend, reflect, and interpret the text meaningfully and critically (Aprilia et al., 2025a; Rosadi & Megayanti, 2022; Zaim & Zakiyah, 2024b).

Regarding the aforementioned issue, it is suggested that teachers integrate an engaging and effective learning medium to assist students in the learning process Handayani, (2024); Hasibuan et al., (2025); Herrera Cano et al., (2023); Ningrum & Putro, (2024). The learning medium can be integrated to engage students' reading literacy, including digital comics (Jamissen et al., 2017). Digital

comic is a comic displayed on digital device functioned to engage and enhance the reading experience (Sanjaya & Aminatun, 2024). It is added that digital comic supports visualization learning where the content is presented with images and text to improve students' reading literacy (İlhan et al., 2021; Saputri et al., 2021). The emergence of digital comics in English classrooms has long identified, in which it is believed that digital comics stimulate students' ideas and improve their vocabulary with a series of images in fixed sequences, helping them to comprehend and criticize the content (Fatimah et al., 2019). In addition, digital comic is a learning medium that is durable, inexpensive, accessible, and interactive to support the learning process (Saputri et al., 2021). Therefore, utilizing digital comics into English classroom is a sustainable approach for an effective learning process and improving students' reading literacy. However, in improving students' reading literacy, the employment of digital comics is supposed to support students' reading literacy as expected in the Merdeka curriculum (Utomo & Ahsanah, 2020). It is mentioned that the Merdeka curriculum frames reading literacy as students' ability in reading a text through higher levels of cognition and metacognition (Zaim & Zakiyah, 2024c). To achieve this objective, a digital comic is supposed to engage students in reading material that incorporates real-world issues.

Sustainable Development Goals (SDGs) are an alternative issue that can be implemented as the primary content for the story in digital comics. The goals focus on solving the problem of several aspects, including economic, educational, social, and environmental issues. Those aspects are the real-world problems that

are integrated with people and nations that must be aware of being a perspective and understand the impact on society by the students (Bogers et al., 2022; Jones et al., 2017). The capacity to investigate the aspects and the issues integrated with Sustainable Development Goals is a key element of global literacy because it is capable of equipping students' awareness and critical thinking related to their lives (Fonseca et al., 2020; Ramos & Schleicher, 2018a). It indicates that the Sustainable Development Goals have a strong correlation to the educational aspect, which is suitable for integration with a digital comic.

Among the seventeen goals, Sustainable Development Goal 12, related to responsible consumption and production, can serve as a relevant and meaningful theme to be integrated into the digital comics. This goal emphasizes awareness and responsibility toward sustainable lifestyles, efficient resource use, and waste reduction (Agbedahin & Agbedahin, 2019). For example, the current issue in Bali about the total amount of rubbish is 1.6 billion per year, with unprofessional management, such as a limitation of available areas to manage the trash and a lack of human resources, technology, and tools to process the trash (Wira Utama, 2023). Incorporating SDG 12 into a storyline engages students with reading materials that not only influence their reading literacy but also stimulate students' critical and reflective thinking towards a real-world problem where they are able to construct meaning and implement it in their action for the environment (Wira Utama, 2023). It is relevant to the objective of the Merdeka curriculum, which places reading literacy not merely as the ability to decode and comprehend written text but as a means to lead students to think critically, reflectively, and

contextually (Aprilia et al., 2025). Hence, SDG 12, based on digital comics embedded with themes provide a pedagogically and contextually relevant approach to developing students' reading literacy while fostering their environmental awareness and sense of global responsibility.

The implementation of digital comics has been conducted as a learning medium in the learning process. Many studies have been conducted to develop digital comics to improve students' reading literacy. Alfanda et al., (2024); Rosyada and Asmarani, (2023) conducted the development of digital comics based on local wisdom and a scientific approach that focuses on the lessons that they deliver to the students, which significantly improved students' reading literacy. Other studies also show that digital comic is developed for improving students' reading literacy and life skills in thematic classrooms, which highlighted that the developed product was effective (Indriasih, 2023; Kartika Sari et al., 2022). Although those studies have successfully developed digital comics to enhance students' reading literacy, most of them have not integrated global sustainability issues. There is still a limited number of study which develops digital comics by incorporating the values of Sustainable Development Goals (SDGs), particularly goal 12 on responsible consumption and production, as the core theme of the learning material. Therefore, the current study is conducted to develop Sustainable Development Goals (SDG) 12 based on digital comics to facilitate the students' reading literacy in achieving reading literacy as framed in the Merdeka curriculum, especially in grade 5 primary school.

1.2 Problem Identification

This study identifies the need of learning medium to facilitate the students' reading literacy, considering that low reading literacy has been perceived as a national issue. It is supported by the preliminary observation indicating that the fifth-grade students at SDN 4 Sanur still face difficulty in comprehending the meaning of a text, both in an implicit and explicit manner. It shows that students' reading literacy has not achieved the objective of the Merdeka curriculum, where students are supposed to be able to have a reading ability that is critical and reflective. Considering that there is no current development of digital comics that follows the objective of Merdeka curriculum that contextually improves students' reading literacy, the current study is conducted to develop a digital comic by integrating SDGs, particularly goal 12 related to responsible consumption and production. This goal is adapted to provide students with a real-problem to facilitate them in reading critically, reflectively, and contextually.

1.3 Research Limitation

This research emphasizes the development of a teaching medium to assist the students in the learning process. Developing digital comics to facilitate the students' literacy by implementing Sustainable Development Goals (SDGs), especially goal number 12, responsible for consumption and production, as the primary resource that is integrated to provide environmental education to the students. The limitation of the study is approached from the students' needs, how the digital comics are developed, the quality of the product, and the feedback

about the product. The implementation will be done once to see the students' and teachers' response to the implementation of SDG 12 based on digital comics.

1.4 Research Questions

As revealed by the background of the study, there are four research questions presented as follows:

1. What are the primary students' needs in the development of Sustainable Development Goals (SDG) 12-based digital comics to facilitate their reading literacy?
2. How is Sustainable Development Goal (SDGs) 12-based digital comic developed to facilitate primary students' reading literacy?
3. How does the quality of Sustainable Development Goals (SDGs) 12-based digital comics, facilitate students' reading literacy?
4. How are the students' and teachers' response about SDG 12 based digital comics in facilitating the students' reading literacy?

1.5 Research Objectives

Based on the research questions, four research objectives emphasize the purpose of the study, that specified as follows:

1. To identify the primary students' need to develop Sustainable Development Goals (SDG) 12-based on digital comics, to facilitate the students' reading literacy.

2. To investigate the development of Sustainable Development Goals (SDG) 12-based on digital comics for facilitating the students' reading literacy.
3. To analyze the quality of SDG 12-based on digital comics, regarding students' reading literacy.
4. To investigate the students' and teachers' responses related to SDG 12-based on digital comics for facilitating the students' literacy skills.

1.6 Significance of The Study

This research is expected to provide the advantages or the benefits of the development of SDG 12-based on digital comics for facilitating primary students' English literacy, theoretically and practically. The significance study can be described as follows:

1. Theoretical Significance

This research reveals that the development of SDG 12-based on digital comics, facilitates primary students' English literacy. The application of digital comics as a teaching medium in the learning process will provide an engaging and interesting learning experience. In addition, the implementation of the development of SDG 12-based on digital comics, has the function of introducing environmental education as a medium to deliver information about how the environment is essential for human life. Theoretically, the utilization of SDG 12-based on digital comics is an alternative way to promote education about environmental issues.

2. Practical Significance

The research focuses on the advantages of the research to the teacher, students, and other researchers.

a. Teachers

This study is expected to assist the teacher in teaching English literacy to the students. To support the teacher in providing an interesting learning experience. As a teaching medium that contributes to the development of the learning process.

b. Students

This research is beneficial for the students to facilitate their English literacy skills. Focuses on increasing students' motivation and interest in developing their literacy skills. Concerning solving the problems connected to literacy skills during the lesson. To assist the students in achieving the learning outcomes and integrated literacy skills in the learning process.

c. Other researchers

This research has the purpose of being a primary resource for other researchers who want to develop digital comics with different content. As a model of technology that can provide an environmental education, it can be used as an example for future research.

1.7 The Specification of The Product

This research encourages the development of digital comics as a teaching medium in the form of an E-book for the learning process for students' English literacy. The characteristics of the product emphasize the digital comics with Sustainable Development Goals aspects and principles of Goal 12, responsible for consumption and production, for instance, the digital comics about food waste, natural disasters triggered by humans, and the use of 3R reduce, reuse, and recycle to manage the rubbish. In addition, the product is designed to facilitate the students' literacy skills, especially at the primary level.

1.8 Development Assumption

The development of the assumptions of the product is presented as follows:

- a. The product is developed based on the aspects of Sustainable Development Goals, which focus on Goal 12, responsible consumption and production.
- b. The product is created as a teaching medium for facilitating the primary students' English literacy skills.
- c. The product is developed in a digital comics platform that can be accessed on the Play Store and can be downloaded on many types of devices, such as cellphones, computers, laptops, or tablets.

1.9 The Definition of Keys Term

The definition of the term in this research consisted of a conceptual definition and an operational definition. The definition is presented as follows:

a. Conceptual Definition

1. Digital Comics

According to Aggleton, (2019), who stated that digital comics are comic art that is provided and allocated into a digital format that has diverse various aspects from traditional comics such as (1) digital comics can be accessed on the digital platform and website, (2) the visual features of digital comics consisted of hyperlink and animation to create an innovative learning experience, (3) the implementation of advance digital platform features to develop the interactive content for the students in achieving the learning outcomes.

2. Sustainable Development Goals (SDGs)

Mhlanga (2023) revealed that Sustainable Development Goals (SDG) are the United Nations program that focuses on the universal, objectives, and interdependent aspects intending to foster economic growth, encourage environmental sustainability, and support social development that is applied to all nations, particularly in countries with unique conditions.

3. Reading Literacy

Novela et al. (2022) defined reading literacy as one of the essential skills that has the purpose of gaining knowledge from documents, books, or monographs integrated into the academic environment.

b. Operational Definition

1. Digital Comics

Digital comics are the product that is developed to achieve the aim of this research, to create a learning medium that focuses on facilitating students' reading literacy at grade 5 primary school, who implement Goal 12 of the Sustainable Development Goals to promote environmental issues in Bali.

2. Sustainable Development Goals

Sustainable Development Goals are the primary resources for developing the content of digital comics that implement one of the goals, which is goal number 12, responsible for consumption and production.

3. Reading Literacy

The reading literacy based on the Organisation for Economic Co-operation and Development (OECD) of PISA, focuses on the collaboration between reading skills with various aspects such as comprehension, evaluation, and utilization of the information from the text personally and socially for grade 5 elementary school students that purpose of the research to develop SDG 12-based on digital comics.