

CHAPTER I

INTRODUCTION

1.1 Study Background

Reading is a process that begins with seeing, proceeds with information receipt based on sight and attention, and ends with brain comprehension. As a result, reading is an advanced language ability that calls for a combined use of several abilities. Upon analyzing the definitions of reading, it becomes clear that various aspects of reading are prioritized. Schunk (2014) states that the process of perception in reading refers to vocabulary recognition and claims that conception entails giving meaning to printed information, which depends on the process of disintegration into elements, whereas Harris and Sipay (1990) place the greatest emphasis on interpretation in reading. Reading proficiency involves processing information for word recognition, identifying the main idea, comprehending the details, identifying the text's structure and authorial prediction, appreciating the significance of the text's ideas, assessing and remembering all of these. These prior knowledge and understanding are well-known plans and they are able to assist readers in reading. These readers first comprehend the content's significance before connecting newly learned information to previously acquired items (Susanti, Buan, & Suhartono, 2013). Previous acquisition of cognitive skills is necessary for reading comprehension to occur. Determining the degree to which reading

proficiency has been developed as a skill that activates higher order talents is also crucial. Prior knowledge of the topic covered in the text, text structure, syntax, and the degree to which cognitive methods are used all play a part in determining the reader's level of reading comprehension. Knowing which methods the student utilizes in this process also can offer some clues regarding the student's potential to learn new reading strategies (Schirmer, 2010).

The idea that reading is an ability that only relies on cognitive abilities is incorrect. Emotional and affective characteristics like motivation, attitude, self-efficacy, and self-confidence also have an impact on reading. Reading comprehension is a complex process that involves the reader, the contextual setting, and the reader's background knowledge. ESL students struggle academically with reading comprehension, and on reading comprehension tests, they perform significantly lower than their monolingual peers (e.g., Aarts & Verhoeven, 1999; Droop & Verhoeven, 1998, 2003; Garcí'a, 1991; Low & Siegel, 2005; Verhoeven, 1990, 2000). Therefore reading comprehension is crucial for the students' academic success, especially for elementary level as the foundation of all learning. Hall & Moats (2000) states the skill of reading comprehension for elementary students are important because first, it can build background knowledge, probably the most critical benefit for all students is that gains knowledge of some information about an environment and

images of things that happen in that environment. Later when students read a sentence or passage about a topic, they are at least familiar and easier for them to determine unknown words and comprehend what they are reading. Second, builds vocabulary, Students with strong comprehension abilities are exposed to new words in context. This promotes the development of one's vocabulary, understanding of grammar, and capacity for clear written and spoken expression. And third, critical thinking skills, Children learn to infer, predict, analyze, and form connections through reading comprehension. Across the curriculum, these higher-order thinking abilities are critical for problem-solving.

However, despite its importance, many primary school students still struggle greatly to improve their reading comprehension abilities. Low desire, limited vocabulary, a lack of prior knowledge, and issues with text structure frequently make it difficult for them to properly comprehend literature. Comprehension becomes much more difficult for ESL students because of language obstacles, cultural differences, and less exposure to English outside of the classroom. Since unresolved reading difficulties can result in long-term academic difficulty, these issues must be addressed as soon as possible. Several school (Alkhaleefah, 2017; Keezhatta & Omar, 2019; Widiyastuti, 2018) have discussed the challenges that students have when developing their reading abilities, and most of them have brought attention to

the same problem that prevents efficient reading in a EFL setting. EFL reading proficiency is not a natural occurrence like other talents are; instead, learners must intentionally work at it by integrating reading with other abilities. The way the alphabets and word sounds work is another important factor to take into consideration (Yule, 2016). Most EFL students struggle with reading, and as a result of their ignorance, they stay in the static stage (Alrabai, 2016). This is the most frequently mentioned reason why students in primary school perform poorly in reading. This feature is related to reading at the first word level.

Based on the preliminary observation in SDN 1 Tukadmungga, it was found several issues regarding the reading comprehension. First, 24 out of 30 students had difficulty reading English texts and were still confused about English letters. According to the teacher at the school, not all students were willing to engage in learning English, especially in reading together and also the teaching methods that relied mainly on textbooks, limited instructional time and low student motivation toward reading activities. More specifically, the students' reading difficulties occurred at multiple levels. At the word-recognition level, many students struggled to decode English letters, leading to slow inaccurate reading. At the sentence comprehension level, students found it difficult to understand sentence meaning due to limited vocabulary. As a result, they also struggled to identify the main idea

of a text. These difficulties demonstrated that raising reading comprehension skills is essential for both academic achievement and training children to comprehend topics outside of the classroom. Students can learn about important global issues like climate change through reading, which is a gateway to knowledge. Students had to interact with educational texts, narratives, and digital materials that depict real-world challenges and their solutions in order to increase their understanding of global issues. Students who receive assistance in overcoming their reading challenges will be better able to relate what they learn in the classroom to the outside world, promoting literacy and social responsibility at a young age. Reading comprehension thus become more than just a talent; it becomes a tool for developing educated, kind, and globally aware people. Therefore, increasing reading comprehension involve more than just improving language skills, it also entail giving young learners the ability to comprehend important global issues such as climate change.

Climate change is one of the most significant problems facing humanity today, which is caused by human activities. The US Environmental Protection Agency (USEPA) states that significant changes in temperature, precipitation, or wind patterns, among other impacts, that take place over several decades or more are considered to be part of climate change (USEPA, 2012). One of the factors contributing to climate change is global warming. One

of the main causes of the rise in greenhouse gas concentrations is human economic activity (IPCC, 2007; Malaysian Meteorology Department, 2009). All societies are facing difficulties as a result of these significant climate changes and their consequences on the ecosystem, as it is anticipated that future generations will suffer more and more from the negative effects of climate change (UNEP, 2012). The importance of global issues (climate change) should be recognized from an early age, for example, to elementary school students. At the elementary level, students need to develop an understanding of basic concepts that underlie weather and climate change (Lambert, Lindgren, & Bleicher, 2012). In order to meet the needs of the elementary school students, an inquiry-based method was used to teach the relevant science concepts (such as the water cycle, greenhouse effect, or carbon cycle). Based on the preliminary observation at SDN 1 Tukadmungga, the students there still unfamiliar with the concept of Sustainable Development Goal, including SDG 13: climate action. This issue is closely relayed to Sustainable Development Goal (SDG 13), particularly Target 13.3, which emphasizes the importance of improving education, awareness-raising, and human and institutional capacity regarding climate change adaptation. So because of that, understanding the causes and consequences of global warming is the first step and. Therefore, it is essential to include education and awareness by addressing global warming issues in school curricula and correcting misconceptions that students and the general public have about it.

It is the most effective way to raise awareness of environmental challenges in nations (Al-Sahili, K., and Demaidi, M. N. (2021). Furthermore, studies reveal that students frequently have misunderstandings regarding climate change and find it difficult to relate it to global warming. Their knowledge levels differ greatly between nations, underscoring the need for more efficient and contextually appropriate teaching methods. Integrating climate education into school curricula, with a focus on elementary students who can get a greater awareness of climate change, its causes, effects, and solutions, is a fundamental step in closing this gap. One effective way to achieve this is by introducing Sustainable Development Goal (SDG) Climate Action through engaging and age-appropriate media by using technology. Technological developments can now be taken consideration while teaching English in order to increase student interaction (Licorish et al., 2018; Santosa, 2017). Students' learning processes can benefit from the use of technology in the classroom. Technological developments have the power to transform human existence. One method for making something abstract concrete is visualization. Visualizations such as two-dimensional figures or three- dimensional models are highly effective teaching tools (Ariana, 2010). Although some experts contend that pictures might influence students' emotions, (Mayer, 2009) indicated that design is crucial since it attracts students' interest (Tomita, 2018). The L2 reading class incorporates digital media or digital comic.

Digital comics are one type of technology-based educational resource that is currently being developed. The greatest alternative available online and through smartphone apps, but they are not yet acknowledged as teaching resources. Digital comics can be used as media to convey concepts through visually appealing and easily comprehensible images, by pictures students' can interesting and easily understand the present messages (Ilham, 2019). The usage of digital comics in L2 reading lesson is a topic that certain students focus on. Digital comics can help students become more literate and adapt to the 21st-century (Issa, 2018). The others researchers (Lazarinis, Mazaraki, Verykios & Panagiotakopoulos, 2015) apply digital comics as alternative learning media. Teaching primary school students literacy skills is the key to encouraging them to like reading and writing. Based on the preliminary observation at SDN 1 Tukadmungga, the students there only facing with the books from the teacher without implement with other media, such as digital comic. Therefore, teachers must constantly be innovative in their use of learning tools in the classroom if they want primary school students to develop a love of reading.

For elementary school students, digital comics' use of images can be very attractive. Digital comics have several characteristics that can support the ideas or messages authors want to convey to readers. Perhaps the ability to select their own format is what unites all digital comics, whether they are available for download or can be read online. The main benefits of digital comics

over other digital learning materials is their visual appeal, which includes engaging characters that complement 5 with the interests of the students. In addition, digital comics are powerful because they integrate both visual and textual elements. Students can not only read the text but also understand meaning through visuals when language and narration are combined with images, colors, and layouts. For young learners, particularly in L2 reading contexts, this synergy makes the messages more memorable, engaging, and simpler to understand. Words alone may not adequately describe passion, attitude, and action, but images do. For instance, bright colors in romance or comedy inspire warmth and fun, whereas dark colors and exaggerated facial expressions in horror comics inspire fear. Visuals are used with sound effects (onomatopoeia), dialogue balloons, and narrative boxes to create meaning. Tone can be indicated by font style, size, and location (strong text for screaming, wavy fonts for frightening sounds, etc). Since digital communication materials blend text, color and image components that stimulate students' interest and can engage each other, they can be successfully incorporated into educational activities (Endarini, 2018).

Digital comics are intrinsically suitable for elementary school students compared to other media such as educational videos or printed storybooks. Unlike videos, digital comics allow students to control their reading pace, reread texts, and focus on specific

words or images which is essential for developing reading comprehension skills. Compared to printed storybooks, digital comics provide multimodal support by combining visual elements, and maintain attention. Furthermore, digital comics present complex concepts such as climate change through simplified narratives and relateable characters, making abstract environmental issues more concrete and understandable for young learners. This combination of text and visuals supports comprehension at both word and sentence levels while increasing motivation and engagement, making digital comics a more effective for literacy and climate education in elementary levels.

Previous studies have shown that digital comic is engaging for elementary students. Digital comics as teaching materials have been shown to be effective in improving student learning independence and valid for use in the classroom (Kusumadewi et al., 2021; Şentürk, 2021). They are also easy to access through smartphones (Handayani, 2016), help in the achievement of academic goals and objectives, and help students direct their own learning (Kumar, 2017). Teachers can more easily convey information in a tangible and understandable way by using learning media (Johan & Ghasya, 2018; Tamo et al., 2019). Students will be more inclined to participate in reading activities if the media is more engaging. One creative digital comics are a media that can be created to increase students' motivation to read. Sequential images

produced with computer software or smartphone and released in digital formats make up digital comics (Megantari et al., 2021; Pinatih et al., 2021). To make students' more interest in studying, these comics ought to be imaginatively created (Aeni & Yusupa, 2018; Handayani, 2021). Other study argues that digital media is a link that may be created, viewed, modified, and even endure throughout time (Wangi et al., 2018). Digital comics are well known for encouraging active learning and reflection on real-life situations, as well as for increasing motivation and participation in the narrative production process, particularly among younger users. Therefore, using digital comics is a great way to meet the needs of students, especially in elementary school, where learning has to be interesting, interactive, easily accessible and engaging for students. In addition to tools that help them become more proficient readers, students also need things that appeal to them and fit with their interests. Digital comics address these needs by combining relevant text with visual appeal, which enhances learning and promotes the growth of understanding, creativity, and critical thinking abilities. In order to develop this interactive media (digital comic), we have to analyze the needs of the students that can be accessible for all students.

Lawson (1979) defines requirements as "something that is recognized but is not in any sense discovered, and its existence derives from whatever criteria are thought to be relevant in making

the diagnoses". This suggests that in order to determine needs, an assessment of the existing state of affairs must be carried out, and subsequent actions must be planned in considering the results. Therefore, planning a course's objectives and creating a curriculum that will meet the needs of a certain student population are the goals of a needs analysis (NA) (Vaghari & Shuib, 2013; Iwai et al., 1999). According to Berwick (1989), need is the difference between "what is," which refers to the current level of learners' knowledge and proficiency, and "what should be," which makes reference to the target situation criteria. Therefore, a NA assists in evaluating the existing state of affairs with the ultimate goal of achieving successful course outcomes (Mackey, 1987). Stated differently, it assists in adapting the current course by examining and modifying the materials in accordance with the requirements of students in a particular educational environment while also optimizing their learning viewpoint (McDonough & Shaw, 1993). Because students' opinions are included, it helps to make the learning environment more learner-centered and could change their general perspective on the process of learning (Fakeye, 2010). Four types of needs were distinguished by Alderson (1980). First, there is a formal need, which is the requirement to satisfy the expectations of the institutions, such finishing the course. The second is a real need, which is what a student is expected to do with the language after mastering it. The third is kind is the want, and the last is a

hypothetical objective need that refers to a better future job. Therefore, it is suggested that curriculum designers frequently assess students' requirements to see if they remain the same in order to prevent misunderstandings that are likely to arise between their needs and the school curriculum (Jackson, 2005). Furthermore, it is acknowledged that a NA should be carried out during the course in order to modify learning objectives as new demands arise. As a result, learning motives can be changed starting with student input. In order to know the elementary students' needs, as a teacher we have to analyze how can we make the students needs are met and also help them to decrease the problems by using innovative online media.

As initial step, this research aims to developed digital comic that contribute for teaching reading comprehension and promoting Climate Action for elementary school students. The novelty of this research lies in its two focus: teaching reading comprehension by digital comic while educate embedding social themes that foster the importance of environment. Through the storyline of climate action and also some characters, students are expected to improve their reading motivation and their empathy with the environment.

1.2 Problem Identification

It will apparent that teachers face some challenges in teaching elementary students reading comprehension: inadequate understanding of reading, a lack of development in reading

comprehension, a lack of recognition of words, difficulty attending students' needs and a lack of reading materials. Previous studies found that teachers offer consistent updates on their progress in reading, extending patience and attending students' participation (Lu, Hayden, 2022). The problems that the researcher found in SDN 1 Tukadmungga were 24 out of 30 students in 6th grade had difficulty when reading long text in English. Based on the interview with the teacher, the teacher said it is hard to teach students in reading especially English learning. The teacher also said that the students still lack of vocabulary, grammar and how pronounce the vocabulary correctly.

Based on the interview, only 10 out of 30 were interested in English. Second problem is limited facilities, especially books. The teacher explained that the school does not provide any English books for students. As a result, English teachers are required to prepare their own references, usually by finding and downloading materials from online sources. Other problem is the limited of time while teaching. Based on the interview, the teacher mentioned that she needed more time to teach English, particularly when working with young learners. The teacher only has 70 minutes in a week to teach English in 6th grade. The teacher said can not focused in one skill which is reading, but in 70 minutes she has to teach and combine the English skills which are speaking, reading, listening, writing. other problem is the teacher is unfamiliar with the concept

of SDG 13: Climate Action. The teacher explained that the learning process was still very basic. As a result, students only relied on the books provided by the teacher, without the integration of any digital media.

1.3 Research Limitation

To conduct this research, there are several limitations to this study. The quality and accessibility of digital devices and internet connectivity were key factors in the digital comic's efficacy. The usage of such digital tools may could face significant obstacles in classrooms with low technology resources. The digital comics was put into use in a comparatively short amount of time. Because of this, the study was unable to accurately assess long-term effects on students' reading comprehension abilities or their behavioral change toward climate action. The target students' literacy level was taken into consideration when creating the comic. Student differences in linguistic ability may have an impact on comprehension results, particularly in multilingual backgrounds.

1.4 Problem Question

- 1 What are the needs of students in reading media to support their reading comprehension and awareness on Climate Action issue?

- 2 How is the development of digital comics as reading media to support reading comprehension and awareness on Climate Action issue?
- 3 How are the students' and teacher's responses to the developed digital comics as reading media on students' reading comprehension and awareness on Climate Action issue?

1.5 Research Objective

1. To identify the needs of students in reading media that can support their reading comprehension and raise awareness about the issue of Climate Action.
2. To develop a digital comic as reading media to support reading comprehension and promoting understanding the awareness on Climate Action.
3. To describe students' and teacher's responses of the developed digital comic on students' reading comprehension and the awareness of Climate Action issues.

1.6 Research Significances

1.6.1 Theoretical Significance

This study offers insightful information about how digital comics may be a useful tool for raising elementary school kids' reading comprehension. The study adds to the increasing body of research that supports the incorporation of sustainability topics into language training by concentrating on Sustainable

Development Goal 13 (Climate Action). In addition to being a basic literacy ability, reading serves as a fundamental for the growth of critical thinking, emotional intelligence, and a wider knowledge base. Students are more likely to engage both intellectually and affectively when reading materials address real-world topics like environmental challenges, which deepens their learning experience.

A number of educational needs are met by the creative learning medium of digital comics. It first responds to students' waning interest in conventional reading materials by providing an engaging and instructive structure that is interactive, visually rich, and narrative-based. Second, by presenting abstract subjects like climate change through accessible characters, real-world situations, and simplified language, digital comics can put them in context and help young students better understand complicated environmental challenges. Third, digital comics encourage values-based education and increase knowledge of environmental responsibility and global citizenship at a young age by incorporating SDG-related messages into the plot.

Furthermore, by fusing literacy development, digital literacy, and sustainability education, including digital comics into the curriculum supports 21st-century learning objectives. In addition to enhancing reading comprehension, this integrated strategy promotes empathy, motivation, and a critical knowledge

of climate action. In this sense, the study emphasizes digital comics as transformative instructional tools that can influence students' knowledge, attitudes, and actions toward a more sustainable future, rather than only as reading aids.

1.6.2 Practical Significance

1. Teachers

The result of this research is will strengthen teachers' understanding of how to teach students use digital comics during reading lessons more engaging while integrating Climate Action content. It offers an example of how to combine reading comprehension with environmental awareness.

2. Students

The result of this research is expected to give fun and interactive learning to improve their reading comprehension while also increasing their concern about environmental issues, especially Climate Action.

3. Other researchers

The research findings can be used a reference by other reseachers when conducting similar observation in another location, to make the result more reliable.