

CHAPTER I

INTRODUCTION

1.1 Background of the Study

In this increasingly developing era, it is very important to instill literacy in early childhood for children's academic success and train children's focus in searching for and learning new things. According to Wibowo et al., (2020) reports that the PISA ranking revealed Indonesia's reading scores ranked 72nd out of 77 countries. Therefore, it is important to improve the quality of education for every student regardless of their background (Mustafa, 2023). PISA aims to evaluate and compare the skills and knowledge of students from different countries around the world in the areas of reading, mathematics and science. According to OECD (2023) PISA result in 2022 In Indonesia, almost no students scored at Level 5 or higher in reading (OECD average: 7%). The importance of literacy development has become a major concern both globally and nationally. Internationally, the Programme for International Student Assessment (PISA) reported that Indonesian students' reading literacy performance remains below the OECD average, indicating that many students still experience difficulties in understanding, evaluating, and reflecting on written texts (OECD, 2023). Although PISA assesses the literacy achievement of 15-year-old students, its findings highlight the need to strengthen literacy development throughout the education system.

At the national level, the Indonesian government has reinforced this commitment through the implementation of the Minimum Competency Assessment (Asesmen Kompetensi Minimum/AKM), which places reading literacy and numeracy as fundamental competencies that students need to develop for lifelong learning (Kemendikbud, 2021). Rather than measuring mastery of curriculum content, AKM emphasizes students' ability to understand, analyze, and use information in meaningful contexts. This policy demonstrates that literacy has become a national educational priority.

Since literacy development begins long before children enter primary school, meaningful literacy experiences should be provided during early childhood education. Whitehurst and Lonigan (1998) explain that emergent literacy develops through children's early interactions with language, books, and print before formal reading instruction begins. Therefore, providing developmentally appropriate reading experiences is essential to establish children's literacy foundation. One learning medium that can support this process is a Big Book integrated with SDG 13 (Climate Action), which encourages children's behavioral reading engagement through interactive shared reading activities.

According to Fitria (2023), literacy is very important for students because it can build basic skills in reading, writing, and arithmetic, besides that, literacy also develops critical thinking and problem-solving skills, which lead to better communication, academic performance, and overall success. Early childhood literacy is considered important as a foundation for future academic success, seen from its benefits such as improving language skills, reading comprehension and communication skills (Hariyono et al., 2024). To increase children's interest in

literacy, apart from good and easy-to-understand content, interesting material is also needed for reading. Several studies have examined material that are good for literacy, for example research conducted by According to Oktavianti & Nur (2024) the development of picture books as a non-academic reading source to stimulate interest in reading and early literacy in elementary grades. In addition, Rahayu & Yunitasari (2024) found that creative books produced through parenting activities can foster children's reading motivation and literacy engagement. Furthermore, Prihantini & Fauziyyah (2023) reported that students showed higher interest when schools provided access to attractive picture story books in the library, highlighting the importance of suitable reading media in shaping positive reading habits.

Although efforts to increase literacy levels in Indonesia have made progress, there is still a need for interesting and accessible learning materials, especially those that are aligned with the SDGs. Therefore, the need for interesting, accessible and effective learning materials must be given great attention because this is crucial in developing children's interest in literacy. For examples in research conducted by Judijato & Suroso (2011) shows that digital devices, such as e-books, educational applications, and online learning platforms, have great potential to improve student literacy by providing flexible access and a variety of relevant reading sources. Although there have several previous studies that has been successful, literacy gaps are still quite large, especially in remote areas and among underprivileged communities. A strong positive correlation was found between increasing digital literacy which is seen as an important driver for sustainable development (SDGs) in the social, economic and environmental fields (Shafira et al., 2024). Therefore, developing learning materials that are innovative, easily accessible, and aligned

with the SDGs is a very important long-term investment for the future of the Indonesian nation.

According to Wibowo et al., (2024), the importance of social capital in fostering literacy skills from an early age through the roles of families, schools, and communities shows that investing in social capital for students' literacy education has a long-term impact on improving their literacy skills in the future. The importance of early childhood literacy is crucial for sustainable development and preparing a highly capable young generation. In addition to education, preparing young people to face environmental challenges and responsibilities is also important, by instilling awareness and action from a young age that is crucial for building a sustainable future. There is still a need for engaging and easily accessible learning materials, especially those aligned with the SDGs. This is especially true for the crucial area of Climate Action (SDG 13), which requires early intervention to encourage responsible environmental management.

Reading engagement is an important aspect of literacy development because it reflects children's active involvement during reading activities. According to Fredricks et al. (2004), engagement consists of three dimensions: behavioral, emotional, and cognitive engagement. Among these dimensions, behavioral reading engagement is particularly relevant to early childhood education because it can be directly observed through children's attention, participation, persistence, and responses during classroom reading activities. Since kindergarten students are still developing their early literacy skills, behavioral engagement provides an appropriate indicator for examining how actively they participate in shared reading experiences. Therefore, rather than focusing on reading achievement, this study

specifically examines students' behavioral reading engagement facilitated through shared reading activities using an SDG 13 (Climate Action)-based Big Book.

Beyond education, preparing young people to face environmental challenges and responsibilities is also crucial, by instilling awareness and action from an early age, which is crucial for building a sustainable future. There remains a need for engaging and accessible learning media, especially those aligned with the Sustainable Development Goals (SDGs). This is particularly true for the crucial area of Climate Action (SDG 13), which requires early intervention to promote responsible environmental management. Teaching children about the environment from an early age is very important to help them become responsible citizens who care about the planet. Studies show that young learners can understand environmental issues if the lessons are given in a fun and engaging way. According to Yang et al., (2022) found that using stories about nature and the environment helped children aged 6–8 develop better awareness and more positive attitudes toward protecting the earth.

There is a significant gap in available resources that effectively communicate the complexities of climate change to young Indonesian learners existing media often lack cultural relevance or fail to meaningfully engage children, hindering their understanding and motivation to act. To develop media that are relevant to children, it is necessary to create engaging reading media. This is also conveyed in research conducted by Putri et al., (2024) which shows that young learners' enthusiasm in using bilingual picture books about climate change in the classroom is based on the theme and illustrations, story content, use of two languages, number of pages, and interactive elements such as crosswords or short

exercises that can hone their language skills. Based on Santosa (2022) instructional media must be clear visually, interactive, and meaningful to maintain the attention of young learner. Also supported by Ratminingsih et al., (2022) students will engage and interact more in a fun and interactive learning activities. It is therefore recommended that bilingual picture books can be developed and implemented as effective and engaging learning media for young learners in English Language Teaching courses.

Based on Gabric (2023) research on Anthropogenic Climate Change (ACC) states that fossil fuel dependence is causing a climate emergency, and despite dire predictions and calls for change, inaction has led to a point where drastic measures like geoengineering may be our only option. This has far-reaching consequences, impacting ecosystems, economies, and human well-being. According to Sanson (2018), climate change is the greatest threat to children in low- and middle-income countries. The field of developmental science can play a key role by helping children and adolescents develop the emotional and practical skills needed to face climate challenges and work towards solutions. Therefore, raising public awareness can be achieved by starting to educate children about climate change from an early age. This is crucial, as they will inherit the consequences of ignorance and will be responsible for implementing solutions. Therefore, early childhood education plays a crucial role in fostering climate and engaging trained students, in line with SDG 13.

According to Ummah (2019) Big Book creates secure and relaxed atmosphere in the classroom and attracts students' attention in teaching and learning process. Based on Harun & Rahim (2010) A good quality big book can be the

basis of a brilliant lesson which allows all the children to enjoy reading the text. According to Hall & O'Connor (2006) Big Book is kind of storybook that printed in large version and Big Book also as large format of printed book with texts and illustrations. Big book, with their large format and attractive illustrations, are a very effective medium for attracting the attention of preschool children. Its large size allows children to see pictures and text clearly, and encourages group interaction while the teacher reads the story. Additionally, big book can be designed with various visual and tactile elements that can help children understand abstract concepts about climate change better. Big book also provide an opportunity for teachers to interact directly with children, ask questions, and encourage discussion about the themes covered.

According to Mahayanti & Suantari (2017), Big Books are appropriate learning media because they present large illustrations, simple language, and meaningful learning experiences that support children's participation during reading activities. Similarly, Wiraprasta et al. (2018) reported that Big Books facilitate English learning by providing attractive visual support and age-appropriate language. Furthermore, Jayendra et al. (2018) revealed that the use of Big Books positively contributed to students' reading comprehension through interactive classroom reading activities. These findings indicate that Big Books are not only appropriate as reading materials but also have the potential to facilitate active participation during shared reading activities.

Although previous studies have demonstrated the effectiveness of Big Books in supporting reading instruction, most of them focused on elementary school students and reading comprehension. Limited attention has been given to

developing Big Books specifically designed to facilitate kindergarten students' behavioral reading engagement while integrating Sustainable Development Goal 13 (Climate Action). Therefore, this study attempts to address this gap by developing a Climate Action-themed Big Book for shared reading activities to facilitate behavioral reading engagement among kindergarten students.

This study specifically focuses on developing a Big Book as a reading medium for shared reading activities rather than measuring students' reading achievement. The developed Big Book is designed to facilitate kindergarten students' behavioral reading engagement by encouraging them to pay attention to the story, participate in classroom interactions, respond to the teacher's questions, point to illustrations, and repeat key vocabulary during shared reading activities. In addition, the integration of SDG 13 (Climate Action) introduces environmental awareness through age-appropriate stories and meaningful classroom discussions. Therefore, this study aims to develop a Climate Action-based Big Book that supports shared reading activities and facilitates kindergarten students' behavioral reading engagement.

Introducing Sustainable Development Goal 13 (Climate Action) in early childhood education is important because environmental awareness and responsible behaviors can be developed from an early age through meaningful learning experiences. TK Telkom Singaraja was selected as the research setting because it implements English learning through shared reading activities, providing opportunities to integrate Climate Action values into reading materials.

Based on preliminary classroom observations conducted in Class A at TK Telkom Singaraja, the researcher found that students' behavioral reading

engagement during shared reading activities was still inconsistent. At the beginning of the reading session, most students paid attention to the teacher and observed the illustrations. However, as the activity continued, several students became distracted, talked with their peers, or shifted their attention to other classroom activities. Although the teacher used storybooks during reading sessions, the available books contained relatively difficult vocabulary and did not provide sufficient visual support or interactive elements to maintain students' participation throughout the activity.

The findings from the preliminary study became the primary basis for designing the developed Big Book. Since students showed greater interest in large illustrations and interactive classroom discussions, the Big Book was designed with colorful full-page illustrations and opportunities for teacher–student interaction during shared reading. The observation also revealed that students responded positively to repeated expressions; therefore, repetitive sentence patterns and controlled vocabulary were incorporated to facilitate participation and word recognition. Furthermore, because several students gradually lost their attention during lengthy reading sessions, the story was developed using short sentences and a concise storyline consisting of 11 pages. Finally, the lack of reading media integrating Climate Action led to the inclusion of SDG 13 values throughout the story. In this way, each characteristic of the developed Big Book directly addressed the needs identified during the preliminary study.

The novelty of this study lies in the development of a Climate Action-based Big Book designed to facilitate students' behavioral reading engagement through shared reading activities. The developed product is expected to provide an engaging

and accessible reading medium while simultaneously introducing SDG 13 values to young learners. Therefore, this study aims to develop a Big Book integrating Climate Action values and evaluate its quality as a reading medium for kindergarten students. This study employed the Design and Development (D&D) model proposed by Richey and Klein (2007), involving the analysis, design, development, and evaluation stages. It is expected that the developed Big Book will facilitate students' behavioral reading engagement while fostering environmental awareness from an early age.

Based on the background, the development of a big book is necessary due to the low level of early literacy in Indonesia, particularly in reading skills among young learners. International assessments such as PISA indicate that Indonesian students still struggle with reading comprehension, which highlights the need for engaging and accessible reading materials from an early age. Early childhood literacy plays a crucial role in supporting academic success, critical thinking, and lifelong learning. However, limited availability of attractive and appropriate reading media, especially in kindergarten settings, hinders the optimal development of children's reading interest and skills.

There is an urgent need for learning materials that introduce environmental awareness and climate change issues in line with SDG 13 (Climate Action). Young children can understand complex environmental concepts when they are presented in a fun, visual, and interactive way. A big book, with its large format, clear text, and engaging illustrations, is an effective medium to support shared reading activities and active classroom interaction. Therefore, developing a climate change-themed big book is important to improve children's reading engagement and

literacy skills while simultaneously fostering early awareness and responsibility toward environmental sustainability.

1.2 Problem Identification

The main problem in this study is that Indonesian children have low literacy skills, as shown by poor PISA reading scores and few students reaching high levels of proficiency. Early childhood literacy, which is important for future learning, is limited because children do not have enough interesting and easy to understand reading media. Many existing books and teaching methods do not catch children's attention, so they are less motivated to read. In addition, there are very few materials that connect reading with important global issues, like Climate Action (SDG 13). Most resources do not explain climate change in a way that is easy and fun for young children, so they have trouble understanding and taking action. This indicates a strong need for simple, engaging, and age-appropriate reading media, such as a Climate Action-based Big Book, to facilitate students' behavioral reading engagement while introducing environmental awareness from an early age.

1.3 Limitation of the Problem

This study specifically focuses on developing a Big Book integrated with SDG 13 (Climate Action) as a reading medium to facilitate kindergarten students' behavioral reading engagement during shared reading activities. Rather than measuring students' reading achievement or reading skills, this study emphasizes observable behaviors, such as paying attention, responding to the teacher's

questions, pointing to illustrations, repeating key vocabulary, and participating actively throughout the shared reading process. Through meaningful stories, attractive illustrations, and teacher-guided interaction, the developed Big Book is expected to encourage active participation while introducing Climate Action values appropriate for kindergarten students.

1.4 Research Questions

Based on the explanation above, this research focuses on developing and evaluating big book to increase preschool students' reading engagement through SDGs-based storytelling. Therefore, this research was conducted by researchers because the results of this research will be an important source for solving reading media problems.

Based on the explanation above, what researchers want to know are:

1. What are the needs of teachers and kindergarten students regarding reading a Big Book for shared reading activities that support Sustainable Development Goal 13 (Climate Action) and behavioral reading engagement?
2. How is Sustainable Development Goal 13 (Climate Action)-based Big Book developed for shared reading activities to facilitate kindergarten students' behavioral reading engagement?
3. What is the quality of the developed Sustainable Development Goal 13 (Climate Action)-based Big Book for shared reading activities according to expert judgment and user judgment?

1.5 Purposes of The Study

Based on the research problems found, there are several purposes of this research:

1. To identify the needs of teachers and kindergarten students regarding reading a Big Book for shared reading activities that support Sustainable Development Goal 13 (Climate Action) and behavioral reading engagement.
2. To develop Sustainable Development Goal 13 (Climate Action)-based Big Book developed for shared reading activities to facilitate kindergarten students' behavioral reading engagement.
3. To obtain a quality of the developed Sustainable Development Goal 13 (Climate Action)-based Big Book for shared reading activities according to expert judgment and user judgment?

1.6 Significance of The Study

1.6.1 Theoretical Significance

This research is expected to contribute to the development of English language learning theory through Big Book, incorporating content that implements SDG 13, Climate Action. The results are expected to serve as a reference for further research in technology-based English language learning, media literacy, and character education.

1.6.2 Practical Significance

1.6.2.1 For Teachers

The study will provide teachers with a new, effective, and ready-to-use resource for teaching complex topics like climate change in a simplified and interactive manner. The findings will offer insights into how to use big book effectively to enhance student engagement and participation in classroom discussions.

1.6.2.2 For Students

This study contain the development of the SDG 13-themed big book will provide an engaging and accessible learning tool that can improve their literacy skills, including vocabulary and reading comprehension. It will also foster an early awareness of climate change and inspire a sense of responsibility toward environmental sustainability.

1.6.2.3 For School

The study can serve as a model for integrating the SDGs into the school curriculum, help the institution fulfill its role in preparing students for a sustainable future. Implementing the big book can enhance the school's reputation as a forward-thinking and environmentally conscious institution.

1.6.2.4 For Other Researchers

This study contributes to the body of knowledge on early childhood literacy and sustainable development education. It provides a blueprint for developing and evaluating educational media for young learners on critical global issues. The methodology and findings can be a valuable reference for future research on similar topics, particularly in the context of developing countries.

1.7 Scope of Study

This study focused on developing a Big Book as a reading medium for shared reading activities integrated with Sustainable Development Goal (SDG) 13 (Climate Action) for kindergarten students at TK Telkom Singaraja. The study adopted the Design and Development (D&D) model by Richey and Klein (2007), including the stages of analysis, design, development, and evaluation.

The scope of this study was limited to developing the Big Book, evaluating its quality through expert judgment and user judgment, and implementing it in a limited classroom trial to observe students' behavioral reading engagement. This study only focused on behavioral reading engagement and did not examine other dimensions of reading engagement or the long-term impact of the developed product.

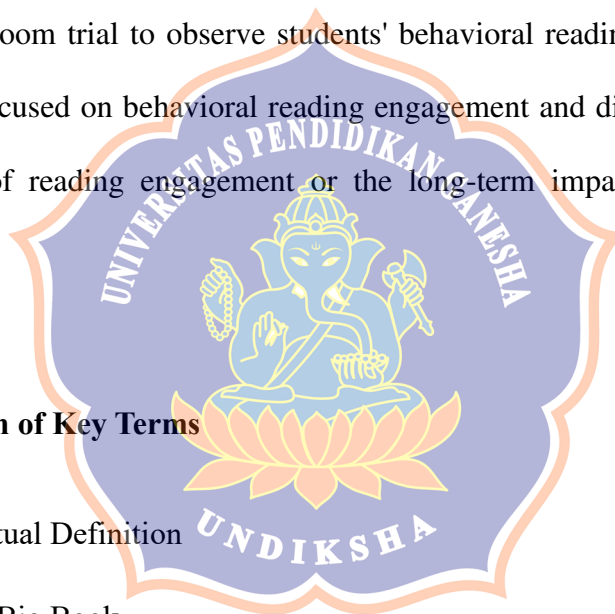
1.8 Definition of Key Terms

1.8.1 Conceptual Definition

1.8.1.1 Big Book

According to Karger and Bone (1992), a Big Book is a large-sized reading book designed with enlarged text, colorful illustrations, and simple language to support shared reading activities and encourage children's participation.

1.8.1.2 Shared Reading



According to Holdaway (1979), shared reading is an instructional reading activity in which the teacher and students read a text together while interacting through questioning, discussion, and repeated reading.

1.8.1.3 Behavioral Reading Engagment

According to Fredricks et al. (2004), behavioral reading engagement refers to students' observable participation during reading activities, including paying attention, responding to questions, participating in discussions, and following classroom activities.

1.8.1.4 SDG 13 (Climate Action)

According to the United Nations (2015) SDG 13 (Climate Action) aims to combat climate change by promoting environmental awareness, climate resilience, and sustainable actions through education.

1.8.2 Operational Definition

1.8.2.1 Big Book

In this study, the Big Book refers to a teacher-made printed reading medium developed by the researcher for kindergarten students at TK Telkom Singaraja. The Big Book measures A3 size (29.7×42 cm) in portrait orientation and consists of 11 pages, each containing one large illustration accompanied by short sentences using simple and repetitive vocabulary. The large format enables all students to clearly view the illustrations and printed text during shared reading activities. The story integrates Sustainable Development Goal 13 (Climate Action) through

age-appropriate language and environmental messages designed to facilitate students' behavioral reading engagement.

1.8.2.2 Shared Reading Activity

In this study, shared reading refers to teacher-guided reading activities using the developed Big Book. The activities were implemented through three stages: pre-reading, while-reading, and post-reading. During these stages, students actively participated by observing illustrations, answering questions, repeating key vocabulary, and discussing the story with the teacher.

1.8.2.3 Behavioral Reading Engagement

In this study, behavioral reading engagement refers to students' observable participation during shared reading activities using the developed Big Book. It includes paying attention to the story, pointing to illustrations, answering the teacher's questions, repeating vocabulary, participating in discussions, and following classroom instructions throughout the reading activity.

1.8.2.4 SDG 13 (Climate Action)

In this study, SDG 13 (Climate Action) refers to the environmental values integrated into the developed Big Book. These values include introducing the importance of planting trees, protecting the environment, and encouraging simple environmentally responsible behaviors that are appropriate for kindergarten students.