DESIGNING CLIMATE CHANGE EDUCATION IN ELT TO SUPPORT JUNIOR HIGH SCHOOL STUDENTS' CLIMATE LITERACY

A THESIS

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FACULTY OF TEACHER TRAINING AND EDUCATION

SRIWIJAYA UNIVERSITY

2024

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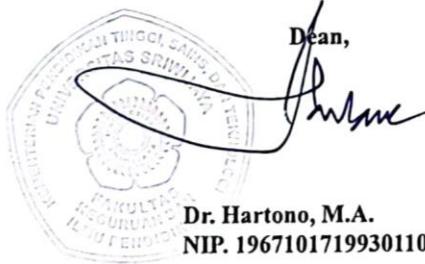
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Certify that the thesis entitled "Designing Climate Change Education in ELT to Support Junior High School Students' Climate Literacy" is my work, and I did not do any plagiarism or inappropriate quotation against the ethics and rules commended by the Ministry of Education of Republic of Indonesia Number 17, 2010 regarding plagiarism in higher education. Therefore, I deserve to face court if I am found to have plagiarized this work.

Palembang, December 24, 2024

The Undersigned,

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DEDICATION

This thesis is sincerely dedicated to:

Half of my soul, my parents, Etty & Suryo, who always give wholehearted
love and endless support to me.

MOTTOS

When you feel tired, remember why you started.

For indeed, every difficulty there is ease.

– QS. Al-Insyirah: 7

ACKNOWLEDGEMENT

Alhamdulillah, all praises to Allah SWT for his merciful, blessing, and guidance that has brought me to this phase, to accomplish writing this thesis entitled "Designing Climate Change Education in ELT to Support Junior High School Students' Climate Literacy". It was written to fulfill one of the requirements for Magister degree in English Language Education major, Sriwijaya University. This thesis would not be done properly without any help and support from a lot of people. Therefore, I would like to deliver the wholehearted gratitude to:

1. My beloved family, my parents and my little sister. Thank you for always supporting me, believing in me, praying for me, and loving me sincerely, endlessly, and unconditionally. I dedicate this to them.
2. My wonderful advisors, Sary Silvhiany, M.A., Ph.D. and Dr. Rita Inderawati, M.Pd., without their advice, support, and never-ending patience this thesis would hardly have been finished. Their guidance means so much to me until this phase. I'm thankful to have such a motivational, supportive, and patient advisors like them. I would like to express my gratitude to Dr. Hartono, M.A., the Dean of Faculty of Teacher Training and Education, and the Head Magister Program of Language Education, Sary Silvhiany, M.A., Ph.D., for their assistance in administration matters. Then, I also would like to express great gratitude to our lecturers, Prof. Soni Mirizon, M.A., Ed.D. and Eryansyah, M.A., Ph.D., as the members of the examination committee who gave suggestions for the revision of this thesis. Next, I would like to express the greatest appreciation to all lecturers who had taught us during our study at Magister Program of Language Education, Sriwijaya University.
3. Thank you also to the Principal of SMPN 1 Banyuasin I, English teacher, stakeholders, the students, and the examiners who provided suggestions for improving this thesis.
4. My friends at college, Wardah, Deby and Kak Khamel who always support and cheer me up, thanks for surviving together..

Palembang, December 24, 2024
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ABSTRACT

Climate change is one of the biggest challenges facing the world today, and education plays a key role in raising awareness and inspiring action. This study examines how integrating climate change education into English Language Teaching (ELT) can improve junior high school students' understanding of environmental issues. Using the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation), the research was carried out at SMPN 1 Banyuasin 1, South Sumatra. The study focused on three main objectives: understanding students' responses to climate-integrated ELT, identifying obstacles faced during implementation, and evaluating the improvement of students' climate literacy. The results showed that teaching climate change topics through ELT helped students not only build their language skills but also deepen their understanding of important environmental concepts. Activities like writing descriptive texts, researching local environmental issues, and creating posters encouraged critical thinking and problem-solving. Students showed significant improvements in their knowledge about greenhouse gases, energy conservation, and the impacts of deforestation. This study demonstrates that combining language learning with environmental education makes lessons more meaningful and relevant. By linking global issues to the classroom, students are better equipped to think critically and take action for a sustainable future. The findings emphasize the power of education to shape young minds and prepare them to contribute positively to solving real-world problems like climate change.

Keywords: Climate change, Climate change education, Climate Literacy

A thesis by Master Program of Language Education, Faculty of Teacher Training and Education, Sriwijaya University

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CHAPTER I
INTRODUCTION

This chapter described the background, the problems of the study, the objectives of the study, and the significance of the study.

1.1 Background

Climate change is a natural event that is happening now because of changes in the world and things that people do. Climate change is a serious global emergency that is changing life on Earth in big ways. Climate change does a lot of damage to the environment, and if emissions aren't cut down, it will ruin the way of life of future generations (Powell, 2017). Climate change affects people all over the world and will have big effects on the earth, society, and future generations. Human activity has sped up global biodiversity loss and the survival of natural resources for future generations (Naeem et al., 2020;Perwitasari et al., 2023) by affecting natural processes that cause climate change. sustainability means meeting the needs of the present without making it harder for future generations to do the same (Moretti et al., 2023). To fix problems that aren't sustainable, like climate change, ESD (Education for Sustainable Development) is the key.

It is part of ESD to teach about climate change (Ho & Tang, 2022; Molthan-Hill et al., 2019). People and the government both know that relying on economic growth alone is not a good long-term plan. Because of this, sustainable development lessons need to be added to school lessons (López-Pérez et al., 2017; Nousheen et al., 2020). A sustainable lifestyle is one of the topics covered in the lessons (Kemdikbudristek, 2022). Lifestyles that are sustainable take into account the needs of the present age without putting those of future generations at risk. This can be done by being smart about how resources are used and causing as little damage as possible to the world (Annur et al., 2022). To deal with problems like climate change, Education for Sustainable Development (ESD) is very important. Climate Change Education is emphasized as a part of ESD, bringing attention to its important role in addressing the issue of

sustainability. It is understood that people and the government are aware that relying on current economic growth is not a long-term solution.

A unique way to teach about climate change that fits right into the school program is through English Language Teaching (ELT). When English Language Teaching (ELT) and Climate Change Education are combined, they create a powerful and useful teaching synergy. According to Anyanwu and Njoku (2023), in every school system, there is a planned program with topics that are taught in the right order to prepare students for a certain job or skill. By talking about climate change while teaching a language, teachers create a setting where students not only improve their language skills but also learn a lot about environmental problems. Not only is teaching about climate change important for everyone, it also fits with the bigger goals for education set by programs like the Merdeka

It looks like adding lessons on climate change to English Language Teaching (ELT) is a smart move that fits in well with the main goals of the Merdeka Curriculum and P5. The Merdeka Curriculum, which was created to help students grow in all areas and improve their critical thinking abilities, knows how important it is to deal with today's problems. Nuril Lubaba & Alfiansyah (2022) figure out that the Merdeka curriculum stresses the significance of character education in creating responsible and democratic citizens. Project-based learning is seen as a useful method to assist students in developing these ideals. Meanwhile, the Strengthening Pancasila Student Profile Project (P5) in the Merdeka Curriculum aims to make students more aware of Pancasila's ideals and help them live by its values every day (Hamidah, 2022; Nurhayati et al., 2023). This combination supports an all-around approach to education, where language skills and morals come together to help students become good citizens who can not only speak well but also live by values that are important for long-term success. The Merdeka Curriculum is meant to encourage critical thinking and growth as a whole. Adding climate literacy to English language studies makes education more cross-disciplinary.

In the setting of English Language Teaching (ELT), teaching about

climate change is a key part of improving climate literacy. As the world struggles to deal with the urgent problems caused by climate change, it is necessary to include climate-related issues in English language lessons. In this case, climate literacy means more than just knowing about environmental problems. It also means knowing about the social, economic, and cultural effects of climate change. Literacy, according to the United Nations Educational, Scientific, and Cultural Organization (UNESCO), means being able to find, read, understand, make, discuss, count, and use printed and written materials in a variety of settings (Nayan et al., 2020). According to Niepold et al. (2007) people who want to be climate literate need to understand three basic ideas: the earth's climate system can be understood and predicted; the field of climate studies is growing; our understanding of the earth's climate system is still being built; and climate studies are based on real-world evidence that can be published and proven through experiments. So, people who are climate-literate know the basic rules of the earth's climate system, how to find accurate scientific information about the climate, how to have meaningful conversations about climate issues and climate change, and how to make smart choices about actions that might affect the climate.

Scholars have done similar studies on teaching about climate change and learning about the climate. The first previous study was conducted by Kolenatý et al. (2022) found that well-planned and well-executed climate change education programs are important for improving climate change literacy and inspiring participants to take action. Having enough climate change knowledge has a big effect on climate change concern, which in turn has a positive effect on participants' self-efficacy and their willingness to act. The second related study had been done by Choi et al. (2021) found that the climate change education program had a big effect on how well junior high school students understood climate change. In particular, the program had a good effect on how students thought about and responded to climate change. In addition, the study found that the students' climate literacy changed in four ways: their ideas became more clear, their thinking widened, they felt more responsible, and they understood

how important climate change was. Overall, the program showed promise in helping young people learn about climate change and become more responsible members of the world and their own countries. The last previous study was done by Leve et al. (2023) found that teachers need to know about 13 clear themes that cover the scientific background of climate change as well as pedagogy and teaching techniques. These themes show that teachers need to know a lot about the climate system, climate science, the causes and effects of climate change, and how to deal with it. They also need to know how to bring this interdisciplinary knowledge into the classroom and make the topic relevant to students' lives while also making them stronger as agents of change. The results make it clear that we need to encourage teachers from different fields to work together to teach about climate change. They also set a standard for how future teachers should be trained.

Based on the preliminary study that conducted by the researcher through informal interview to English teacher and some students at SMPN 1 Banyuasin 1, The results of the interview show that teachers are not putting what they learn into practice. The main reason for this lack of look is teachers who don't know much about climate change. Many teachers may not fully understand the effects and difficulties of climate change yet, which makes it harder for them to use it in their English classes. It was also clear from interviews that the kids had never been taught about climate change. This difference in what teachers and students know about climate change shows how important it is to do study to come up with effective ways to teach students about it. The new thing about the study is that it fills in a gap in the way English Language Teachers teach about climate change in schools. Climate change topics are taught randomly in English classes, according to the study. This shows that the current English curriculum is not consistent and does not include these subjects. Also, the study's focus on South Sumatra gives useful specialized data that lets teaching methods be changed to fit the specific needs and circumstances of the area, since most research on climate change education is done at the elementary school level. This study stresses how important it is for students to have specific tools and a dedicated

curriculum in order to fully understand climate change, which is something that is currently lacking. The study suggests a new way to improve students' climate awareness by focusing on combining lessons on climate change with English language classes. Finally, Through this kind of research, we can equip educators with the knowledge and tools necessary to integrate climate change topics into English Language Teaching, which will ultimately shape climate change literacy among students. The title of the research is "*Designing Climate Change Education in ELT to Support Junior High School Student's Climate Literacy*".

1.2 The Problems of the Study

From the background described above, the problems of this research is formulated into the following question.

1. How do the students respond to instructional design and development in which climate change education integrated in ELT ?
2. Are there any obstacles or barriers faced in implementing "Climate Change" based education in teaching English in junior high schools ?
3. How does students' climate literacy develop after the implementation of integrated climate change education in ELT ?

1.3 The Objectives of the Study

In relation to the problem above, the objective of this study:

1. To know how students respond to instructional design and development when climate change education is integrated into ELT.
2. To identify any obstacles or barriers encountered in implementing climate change-based education within the teaching of English in junior high schools.
3. To assess the development of students' climate literacy following the implementation of integrated climate change education in ELT.

1.4 The Significance of the Study

The results of the studies were intended to provide a contribution to education, particularly to the following parties:

For English teachers, through incorporating climate change education into English language teaching (ELT), this study gives English teachers a chance to improve their methods. It gives them useful information and tools to deal with the important global problem of climate change while they are learning a language.

For students, the study gives students a new and interesting way to learn English. It improves not only their language skills but also their knowledge and awareness of climate change. The goal of adding climate change lessons to ELT is to help people become more aware of and knowledgeable about the world.

For future researchers, This thesis lays the groundwork for future researchers to learn more about climate change teaching in English as a Second Language (ELT) and make it better. It gives us a way to look into how well different teaching methods, materials, and approaches work at helping students learn about climate change. It's also a useful resource for furthering study in the area where language learning and environmental awareness meet.

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