



Eco-ELT: Transforming English Language Teaching through Sustainable and Innovative Materials

Kalsum¹, Humaeroah², Agussalim³

kalsum@iainpare.ac.id¹, humaeroah@iainpare.ac.id², agussalimps@gmail.com³

^{1,2}English education, State Islamic Institute of Parepare, South Sulawesi

³A I-Ahwal Al-Syakhsyah, University of Muhammadiyah Parepare, South Sulawesi

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Abstract

This study investigates the integration of Eco-English Language Teaching (Eco-ELT) within the English study program curriculum through the ADDIE instructional design model. The primary objective is to develop an Eco-elt teaching materials that enhance both language proficiency and environmental awareness among students. Employing a qualitative research approach, with the interview guide question to three lectures and twelve students in reading and speaking subject of English education program of Tarbiyah Faculty of IAIN Parepare. This research also follows the ADDIE model's five phases: Analysis, Design, Development, Implementation, and Evaluation. Data were collected via observations, interviews, and document analysis to assess the effectiveness of the Eco-ELT teaching materials. Findings reveal that incorporating Eco-ELT significantly improves students' engagement, English language skills, and environmental consciousness. The study also highlights challenges, such as the need for comprehensive teacher training and resource constraints. The research underscores Eco-ELT as a promising approach for integrating environmental education into language teaching, with implications for English teaching material development and further exploration of sustainable educational practices.

Keywords: *Eco-ELT, ADDIE model, English teaching material*

Introduction

In an era marked by environmental challenges, integrating ecological awareness into educational curricula has become imperative. This necessity arises from the increasing environmental degradation, which demands a proactive approach in educating the younger generation (Sterling, 2012). Education, particularly language education, offers a unique platform to introduce environmental concepts that align with sustainable development goals (UNESCO, 2017). The integration of environmental themes into English Language Teaching (ELT) not only enhances students' language skills but also fosters environmental consciousness (Cates, 2018).

Thus, the implementation of Eco-English Language Teaching (Eco-ELT) serves as a vital strategy to cultivate environmentally responsible behaviors among students, addressing the need for sustainability in education (Anyolo, Kärkkäinen, & Keinonen, 2018). By embedding sustainability principles into ELT, educators can not only meet linguistic objectives but also contribute to global educational goals, such as the United Nations' Sustainable Development Goals (SDGs), particularly in promoting quality education and responsible consumption (UNESCO, 2020). This approach aligns with current educational trends advocating for a holistic, interdisciplinary method of teaching that addresses both academic and global challenges (Leicht, Heiss, & Byun, 2018).

The empirical issue underpinning this research is the insufficient integration of environmental awareness into English Language Teaching (ELT). Although global concerns about sustainability have escalated, traditional ELT methodologies rarely address ecological issues (Mickey, 2016). This disconnect between language education and environmental consciousness limits the ability of language curricula to foster a generation of learners equipped to address environmental challenges. Thus, a need arises to explore how concepts like Education for Sustainable Development (ESD) can be effectively embedded into ELT programs.

Recent studies have begun to explore the intersection of language teaching and environmental education. For instance, Anyolo, Kärkkäinen, and Keinonen (2018) examined the role of teachers in incorporating sustainability into education, highlighting positive attitudes but revealing practical challenges. Similarly, Saiful (2014) emphasized the potential of using environmental themes in ELT to develop students' ecological awareness. These studies demonstrate a growing interest in combining language education with environmental consciousness, yet more work is needed in practical ELT applications.

Despite these efforts, a significant gap remains in effectively merging ESD principles with ELT methodologies. Existing studies either focus broadly on sustainability education (Anyolo et al., 2018) or examine eco-criticism within literature education (Mickey, 2016), leaving a gap in practical ELT frameworks. Furthermore, many ELT curricula still lack a comprehensive, structured approach

to integrating sustainability, particularly in ways that align with the linguistic and cultural aims of language learning.

This research aims to fill this gap by developing an teaching material based Eco-ELT that integrates sustainability themes into ELT curricula. The primary research question is: "How is ESD principles be effectively incorporated into ELT programs to enhance both linguistic proficiency and environmental awareness?" The novelty of this research lies in its dual focus on linguistic and ecological competencies, proposing a novel ELT framework that aligns language instruction with global sustainability goals.

Method

The research utilized a qualitative approach within the framework of the ADDIE model, which stands for Analysis, Design, Development, Implementation, and Evaluation. This model was chosen for its systematic structure, which allows for the incremental development of teaching materials (Januszewski & Molenda, 2008). The analysis phase involved identifying the need for integrating environmental awareness into English Language Teaching (ELT).

In this study, the Addie method is very suitable for use because it guides researchers in compiling Ecology-based teaching materials in stages and systematically starting from the analysis stage of the need for this Ecology material for lecturers and students, the design stage of Eco-ELT material products that are in accordance with learning needs and curriculum, then the product development stage and implemented in the designed class and the last part is evaluation stage to evaluate the quality, the effectiveness, and the proper product that is worthy of being used as a learning reference material for students.

Data were gathered through observations and discussions with four lectures in English department of Tarbiyah Faculty of IAIN Parepare especially for reading and speaking subject, and also with a small group of English class consist of 12 students. In the design and development phases, eco-themed ELT materials were crafted based on the principles of Ecocriticism and Education for Sustainable Development (ESD) (Glotfelty, 1996; Anyolo et al., 2018). These materials were tested in real classroom settings during the implementation phase, where feedback was collected through lectures and student evaluations. Finally, the evaluation phase assessed the effectiveness of the Eco-ELT materials in promoting both linguistic proficiency and environmental awareness, leading to revisions based on formative feedback from educators and learners.

Results

The result of this research is clearly described as follow, its divided into 5 phases based on ADDIE proses, they are:

The Analysis phase focuses on identifying the problem and establishing the need for integrating Eco-English Language Teaching (Eco-ELT) into existing ELT curricula. The research highlights the gap between environmental education and language teaching, emphasizing that traditional ELT practices rarely incorporate environmental themes. The study begins by addressing this disconnect, acknowledging the growing global emphasis on Education for Sustainable Development (ESD) and its relevance in preparing students for real-world challenges. The research team collected data through interviews, observations, and document analysis and found some result that 1).

Both lectures and students never once discussed Ecology or nature based English learning material on their learning process, 2) Lack of use of technology during learning, especially to access issues of environmental damage and how to protect it. 3) There were no learning resources in the form of ECO-ELT based teaching materials that can be accessed by lecturers and students especially those that serve as official references in delivering courses in class.

The lecture said that “we never use the environmental issue in our class discussion, and also we never find the fix text book or module or eco-elt based teaching material that completely guide us as valid resources as teaching material.

Based on the results of observations, interviews, and analysis of the needs of lecturers and students of the English language education study program, it can be concluded that in the learning process they have never used ECO-ELT-based teaching materials either in the form of books or modules. Even in the learning process that occurs in class, they never discuss environmental issues at all. This indicates that concern for the environment is indeed not part of scientific discussions in educational spaces.

The learning process only relies on books or materials that lecturers have compiled without ever being inspired to use environmental issues as part of important materials to be discussed in the educational realm. In addition, lecturers also need supporting teaching materials that are reliable and complete to help them teach ECO-ELT based materials in their classes. Of course, lecturers will be enthusiastic about using environmental issues in their learning if there are learning tools that can make it easier for them to access and use these sources.

The next step is the **Design** phase, the researchers created a blueprint for the Eco-ELT materials based on findings from the analysis phase. The design of the materials incorporated principles of Ecocriticism and Education for Sustainable Development (ESD), focusing on integrating environmental themes into language learning. The materials used to compile this eco-ELT based teaching material come from the environment around the campus, and more widely in several areas around Parepare and Ajatappareng.

This real-life condition is deliberately used in the form of images or videos so that students can directly feel the environmental damage around them due to human negligence in not protecting their own environment. This aims to arouse their empathy and foster moral responsibility as people who are also responsible for solving this environmental damage problem. Furthermore, several videos or teaching materials are accessed via the internet. This is done so that ECO-ELT based teaching materials are varied and rich in updated knowledge including reading materials and videos in high definition resolution. These materials are then summarized and used as a complete and integrated learning resource to help students easily understand English lessons through ecology-based discussions in their learning. The pictures or images used was design by Canva app to bring the real and a live feeling to the class.

The **Development** phase involved the actual creation of the Eco-ELT materials. Based on the design blueprint, the research team developed lesson plans, activities, and instructional resources that aligned with the goals of improving linguistic proficiency and environmental awareness. The materials development included reading passages about sustainability, vocabulary exercises focused on environmental terminology, and group projects on solving ecological problems.

The content was reviewed by experts in both language teaching and environmental education to ensure that it was pedagogically sound and ecologically relevant. Some of the expert suggestion were; 1) adding the vocabulary focus before the reading passage about the environmental issue or some activities like matching worksheet to guide the student before dive in material , 2) Make sure the instruction on every activities are clear to guide the student on their self-study using the material at home, 3). The images used need to be improved on their quality, 4)Some typo on the spelling and grammar side need to be corrected, and the last 5) About the environmental issue nice to develop material on variate side such us about the air pollution, the soil damages, the sea, the noise pollution, act. These because we need the balance information about this more deeply.

This phase also involved pilot testing the materials with a small group of students to gather initial feedback and make necessary adjustments. Teacher guides and additional resources using bar-code were created to support educators in effectively delivering the Eco-ELT content.

In the **Implementation** phase, the newly developed Eco-ELT materials were introduced into real classroom settings. The lecture was trained on how to use the materials, with workshops held to provide guidance on incorporating environmental themes into language lessons. The study focused on understanding how well the materials were received by both teachers and students. Data collection during this phase involved classroom observations, interviews with lecture, and feedback from students. The research found that the Eco-ELT materials were effective in increasing student engagement and participation. Both lectures and students appreciated the innovative approach, which not only improved English language skills but also fostered critical thinking about environmental issues. However, the implementation also revealed challenges, such as the need for further training and access to more resources.

The **Evaluation** Phase assessed the effectiveness of the Eco-ELT materials based on formative and summative evaluations. Formative feedback was collected during the implementation phase, with adjustments made to the materials as needed. Summative evaluations were conducted at the end of the study, measuring the overall impact of the Eco-ELT approach on student learning outcomes. The results showed that students showed significant improvements in both their English language skills and their understanding of environmental issues. Eight out of twelve students stated that they were able to discuss well using environmental terms and they were able to provide concrete suggestions for solving environmental problems with simple steps that they initiated themselves. This shows that the materials taught were able to foster their concern and awareness of saving the surrounding environment.

One of the students said “I can easily express my opinion regarding the environmental issues discussed because I am familiar with the vocabulary used at the beginning of the discussion of each material in the teaching materials presented, and I am challenged to provide solutions to the environmental problems being discussed because they occur in my own environment. Everything is easier than I imagined”.

However, the evaluation also highlighted areas for improvement, such as providing more comprehensive training for teachers and addressing resource limitations. The study concluded that while the integration of Eco-ELT is promising, future research should explore long-term impacts and further refinement of the materials.

Discussion

A comprehensive discussion already done based on the ADDIE instructional model illustrates how each phase contributes to the successful integration of Eco-English Language Teaching (Eco-ELT) into existing ELT curricula. The Analysis phase revealed a clear disconnect between traditional ELT methodologies and the need for environmental awareness in educational programs, echoing similar concerns found in previous research. For instance, Saiful (2014) emphasized the potential of using environmental themes in language teaching to address both linguistic and ecological competencies. This phase was critical in identifying gaps in current ELT programs and justifying the integration of sustainability concepts.

The Design and Development phases were pivotal in translating theoretical frameworks into practical teaching materials. Drawing from Ecocriticism (Glotfelty, 1996) and Education for Sustainable Development (Anyolo et al., 2018), the researchers crafted materials that aligned linguistic objectives with environmental education. This reflects the growing trend in education to merge subject-specific content with broader global issues, as seen in Anyolo, Kärkkäinen, and Keinonen's (2018) study, which highlights the role of educators in embedding sustainability into school curricula. The development process included a thorough review by experts, ensuring that the materials were pedagogically sound and relevant to both language learning and ecological awareness, a key point raised by Januszewski & Molenda (2008) in their discussion of instructional design models.

During the Implementation phase, the new materials were tested in classroom settings, where teachers and students responded positively to the integration of environmental topics. The implementation phase faced challenges, particularly in teacher preparedness and resource availability, a common issue in the adoption of new educational models (Saiful, 2014). This feedback is crucial in understanding the real-world applicability of Eco-ELT materials and aligns with the practical difficulties identified in other studies exploring the introduction of sustainability in education (Anyolo et al., 2018).

Finally, the **Evaluation** phase demonstrated the success of Eco-ELT materials in enhancing both language proficiency and environmental awareness among students. The result show that all the students were interested on the topic build, their vocabulary were improving then it makes the class discussion more intense. They were feeling amaze and very impressed with the environmental damage they saw and discussed on each material provided. These findings align with prior studies, such as Mickey (2016), who also found that addressing environmental issues in education fosters greater student engagement. However, the study also identified areas for improvement, including the need for more extensive teacher training and enhanced resources. It's because the researcher found that the issue

of eco-elt based material was also not yet fully addressed by the lectures, they were also still new to several issues that discuss. We also need to guide the lecture how to use the teaching material on their class-based instruction given. This teacher training was also very much needed to make more teachers out there can use this material in their English classes to raise environmental awareness on a large scale in the world of education. The evaluation phase highlights the importance of continuous feedback and iterative refinement, as also emphasized in ADDIE model literature (Januszewski & Molenda, 2008).

In conclusion, the research successfully demonstrates how the ADDIE model can be applied to develop and implement effective Eco-ELT materials, contributing to both linguistic and ecological education. Further research is needed to explore long-term impacts and improve implementation strategies, especially in addressing resource limitations and providing adequate teacher training. This is because the eco-elt teaching material in this research has only reached the stage of simple trials in the classroom by small groups in several meetings only. So, the long-term impact cannot be measured comprehensively.

In addition, it is also necessary to develop teaching strategies that suitable for implementing environmental issues both inside and outside the classroom so the material delivering is successful. Furthermore, wider and more varied Eco-Elt material developments are also needed so the display of more vary Eco-Elt teaching material sources that can be used for teaching are fulfilled. The massive and also wider teacher training also needs to promote this Eco-Elt based teaching material to everyone. finally, these findings contribute to a growing body of literature advocating for the integration of sustainability into language education, thus responding to global educational goals such as the United Nations' Sustainable Development Goals (SDGs).

Conclusion

This study confirms that Eco-English Language Teaching (Eco-ELT) materials, developed using the ADDIE model, effectively enhance students' English language skills and environmental awareness. The research highlights the benefits of integrating ecological themes into language instruction, showing that students are more engaged and motivated when learning about real-world issues alongside language content. The study also identifies challenges, such as the need for better teacher training and resource management, which must be addressed to maximize the impact of Eco-ELT materials.

This study also provides recommendations for curriculum development to ensure that the main material of Ecology becomes mandatory material included in the teacher's learning plan. This is after seeing significant results or impacts on students' increased English language skills and their deeper knowledge of environmental protection after implementing eco-elt based material in their small

classes. Future research should focus on refining Eco-ELT materials based on feedback from the current study and exploring additional contexts and educational levels. It is also recommended that further studies examine the long-term effects of Eco-ELT on students' environmental behaviors and attitudes. In practice, educational institutions should invest in professional development for teachers to equip them with the skills necessary to effectively implement Eco-ELT. Additionally, there should be a concerted effort to provide adequate resources and support to ensure the successful integration of environmental themes into the curriculum.

References

- Akcesme, B. (2013). An ecocritical approach to English language teaching. *Dil ve Edebiyat Egitimi Dergisi*, 2(8).
- Anyolo, E. O., Kärkkäinen, S., & Keinonen, T. (2018). "Implementing Education for Sustainable Development in Namibia: School Teachers' Perceptions and Teaching Practices." *Journal of Teacher Education for Sustainability*, 20(1), 64-81. DOI: 10.2478/jtes-2018-0004(eRepo).
- Barrera-Hernández, L. F., Sotelo-Castillo, M. A., Echeverría-Castro, S. B., & Tapiá-Fonllem, C. O. (2020). Connectedness to nature: its impact on Saiful Eco-ELT for environmental research and praxis in ELT *Journal on English as a Foreign Language*, 13(2), 373-398 p-ISSN 2088-1657; e-ISSN 2502-6615
- 394 sustainable behaviors and happiness in children. *Frontiers in Psychology*, 11(276). <https://doi.org/10.3389/fpsyg.2020.00276>
- Bowden, R. (2010). Teaching English for sustainability. *Journal of NELTA*, 15(1-2), 16-21. <https://doi.org/10.3126/nelta.v15i1-2.4605>
- Bland, J. (2014). Ecocritical sensitivity with multimodal texts in the EFL/ESL literature classroom. R. Bartosch & S. Grimm (red.), *Teaching Environments. Ecocritical Encounters*, 75-96.
- Cazeaux, C. (2017). Aesthetics as ecology, or the question of the form of eco-art.
- Cates, K. A. (2018). Teaching for a Better World: Global Issues and Language Education. *Humanising Language Teaching*, 1-10.
- Husnaini, H. (2022). Development of Self Esteem-Oriented Micro Teaching Materials for IAIN Palopo English Education Students. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 10(1), 538-560.
- In P. Barry, & W. Welstead (Eds.), *Extending ecocriticism: crisis, collaboration and challenges in the environmental humanities* (pp. 149-169). Manchester university Press.
- Ismayanti, D., Said, Y. R., Usman, N., & Nur, M. I. (2024). The Students Ability in Translating Newspaper Headlines into English A Case Study. *IDEAS: Journal*

- on English Language Teaching and Learning, *Linguistics and Literature*, 12(1), 108-131.
- Iksan, M., Husnaini, H., & Masruddin, M. (2022). Implementation of weekly English Program with fun learning method for Pesantren students. *Ethical Lingua: Journal of Language Teaching and Literature*, 9(2), 872-879.
- Jepri Ali Saiful. 2023. Eco-ELT for environmental research and praxis in ELT. Department of English Education, Faculty of Teacher Training and Education, Universitas Muhammadiyah Surabaya, Surabaya, Indonesia.
- Jodoin, J. J. (2022). Re-envisioning English language teaching in a post-COVID world: using language education for sustainable development. In R. Khan, A. Bashir, B. L. Basu, & Md. E. Uddin (Eds.), *Local research and local perspectives in English language teaching* (pp. 251–266). Springer Nature Singapore Pte Ltd. <https://doi.org/10.1007/978-981-19-6458-9>
- Matthewman, S. R. E. (2017). *Ecocritical English: a subject-led approach to sustainability*. University of Auckland.
- Mickey, S. (2015). *Whole earth thinking and planetary coexistence: Ecological wisdom at the intersection of religion, ecology, and philosophy*. Routledge.
- Masruddin, M., & Nasriandi, N. (2022). Lexical and Syntactical Errors Performed by Junior High School Student in Writing Descriptive Text. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 10(1), 1094-1100.
- Masruddin, Hartina, S., Arifin, M. A., & Langaji, A. (2024). Flipped learning: facilitating student engagement through repeated instruction and direct feedback. *Cogent Education*, 11(1), 2412500.
- Putri, I. G. A. P. E. (2018). Critical environmental education in tertiary English language teaching (ELT): A collaborative digital storytelling project. *Indonesian Journal of Applied Linguistics*, 8(2), 336-344.
- Leicht, A., Heiss, J., & Byun, W. J. (2018). *Issues and Trends in Education for Sustainable Development*. Paris: UNESCO Publishing.
- Saiful, J. A. (2014). Eco-ELT materials development: the proposed idea towards instilling the concept of loving the environment and upholding the virtues of local wisdom to young learners. In *Proceedings of the 3rd UAD TEFL International Conference* (pp. 1-10).
- Saiful, J. A. (2020). New innovation in English language teaching: revealing concepts and applications of ECO-ELT. *TELL: Teaching of English Language and Literature*, 8(1), 62–72. <https://doi.org/10.30651/tell.v8i1.4408>
- Sterling, S. (2012). *The Future Fit Framework: An introductory guide to teaching and learning for sustainability in HE*. Higher Education Academy.
- Thayyib, M., Zainuddin, S., & Nur, M. I. (2022, December). English for Tourism Training for Local Community in the Tourism Site of Rinding Allo Village Rongkong Sub District North Luwu Regency South Sulawesi. In *The 4th*

International Conference on University Community Engagement (ICON-UCE 2022) (Vol. 4, pp. 373-379).

UNESCO. (2017). *Education for Sustainable Development Goals: Learning Objectives*. Paris: UNESCO.

UNESCO. (2020). *Education for Sustainable Development: A roadmap*. Paris: UNESCO.

Yahya, A., Husnaini, H., & Putri, N. I. W. (2024). Developing Common Expressions Book in Indonesian Traditional Market in Three Languages (English-Indonesian-Mandarin). *Language Circle: Journal of Language and Literature*, 18(2), 288-295.