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Eco-ELT for environmental research and praxis in ELT

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Abstract

Global environmental catastrophes affecting present planetary ecosystems necessitate immediate and coordinated actions from all sectors and disciplines, including English language teaching (ELT). ELT shares the responsibilities with other disciplines to address ecological crises like climate change and biodiversity loss. However, environmental research and praxis in ELT lack of movement due to lack of unifying concept. An existing related concept, Eco-ELT, focuses solely on ecocriticism approach in ELT, limiting its scope. In fact, environmental research and praxis in ELT can take many forms, approaches, and models. For that reason, this conceptual article extends the Eco-ELT by elaborating on its philosophical standpoints: ontology, epistemology, and axiology. It also presents the Eco-ELT principle and framework of practice for English teachers, curriculum designers, and policymakers to implement the Eco-ELT intervention in English education. Finally, it elucidates the Eco-ELT research principle and area. These complete elaborations of the Eco-ELT aim to enhance and organize the structure of environmental movement in ELT and advance the contributions of ELT in decolonizing the Earth.

Keywords: Eco-ELT; ecopedagogy; education for sustainable development; environmental humanities; environmental sustainability

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Introduction

Earth, as a crucial provider of life for all organisms, faces an increasingly urgent and critical situation. A recent report from United Nation Environment Program (UNEP) in 2023 informs that the heat of temperature on Earth has risen to 1.1 °C above pre-industrial levels over 200 years leads to ongoing and hazardous weather events that pose a threat to both people and the planet (UN Environment Programme, 2023). Additionally, the living planet report of the World Wildlife Fund (WWF) also announces that the mammal, bird, fish, reptile, and amphibian populations have dropped roughly around 68% since 1970 and 21,000 populations of 4,393 vertebrate species have also been experiencing biodiversity loss (World Wildlife Fund, 2021). These few instances of an ecological catastrophe demand bold and decisive actions (Crist et al., 2021) from any sector and discipline.

As one of the disciplines in education, English language teaching (ELT) has contributed to addressing environmental issues through incorporating environmental teaching in English lessons. The attempts of environmental teaching in ELT have revolved around four bases of postulate. The first is the benefits of environmental teaching in language education for developing learners' language learning and character inside and outside school (Hauschild et al., 2012). The second is the responsibility of the ELT field to address global issues, including the environment (Mercer et al., 2022). The responsibility entails promoting ecological thinking and critical awareness among English students alongside their language development (Xiong, 2014). The third is the potential of the ELT field to address sustainability issues (Bowden, 2010) in English lessons, such as climate change, pollution, ocean acidification, deforestation, etc. The fourth is the appropriateness of ELT instructions for comprehensive intellectual and philosophical discussions of nature and environmental ethics through literary teaching (Beigel, 1996).

Under those postulates, the endeavors have successfully disclosed instructional methods and strategies for environmental teaching in ELT, such as using content and task-based language learning instructions (Hauschild et al., 2012; Nkwetisama, 2011), ecocomposition (Elsherif, 2013) or environmental essay writing (Setyowati et al., 2022b), and digital storytelling (Putri, 2018).

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Furthermore, they also have enhanced English students' speaking skill (see Manurung & Ria, 2018), environmental awareness (see Manurung & Ria, 2018; Setyowati et al., 2022a), cultural and ecological identities (see Matthewman, 2017), and critical thinking skills (see Setyowati, et al., 2022a). However, despite these valuable contributions, environmental teaching and research in ELT remain limited in numbers. Therefore, there is a pressing need for a widespread expansion of these efforts. Such endeavors aim to provide more evidence and demonstrate a stronger commitment from the ELT field in tackling environmental catastrophes. The greater the number of initiatives for environmental research and teaching in ELT, the better the outlook and the stronger the position of the ELT field in global environmental sustainability. This can help dispel the skepticism regarding the roles and participations of ELT in decolonizing the Earth. As previously claimed, ELT carries a social responsibility to enhance students' ecological and critical thinking and English skills (Xiong, 2014) to effectively tackle global issues like the environment (Mercer et al., 2022).

The ecological movement within ELT is essential to flourish as it also helps strengthen students' favorable relationship with nature. In English lessons, students can have theoretical and philosophical discussions of environmental topics and learn about environmental ethics through literary texts (Beigel, 1996). They can also do various practical real-life activities related to the environment, such as environmental advocacy through digital storytelling (Putri, 2018) and essay writing (Setyowati et al., 2022b). The combination of these diverse theoretical, philosophical, and physical activities about the environment in English lessons provides English students with the avenues to comprehend the roots and impacts of environmental crises.

They will understand that their unsustainable actions on the environment bring negative impacts on the life and equilibrium of all organisms within the planetary ecosystems. As a result, they can see and feel a sense of unity with nature and its contents. This sense of oneness to nature is vital for a sustainable future. It encourages people to perform pro-environmental behaviors (Barrera-Hernández et al., 2020; Martin et al., 2020; Yu et al., 2019). It also alleviates people's harm to nature (Mayer & Frantz, 2004). Finally, it helps to address interrelated nature calamities affecting the Earth, such as climate change and biodiversity loss (Richardson et al., 2020), as reported by UN Environment Programme (2023) and World Wildlife Fund (2021) above. Therefore, Saiful (2020) strongly encourages more efforts at environmental teaching in ELT, especially using the ecocriticism approach. He foresees other benefits of the efforts. They have the potential to assist students in linguistical and intellectual growth as well as emotional and social development, while also shaping English

teachers into “green” moral agents, morally conscious teachers advocating environmental sustainability actions. Accordingly, Saiful (2020) further propounds a concept called “Eco-ELT” as a place for environmental movements in ELT to live and grow.

The proposed concept of Eco-ELT is devoted to using environmental literary documents and media under an ecocriticism lens in teaching environmental topics in ELT. Nevertheless, this ecocriticism approach could not cover the numerous ways of ecological movements in ELT, for example, using a think-pair-strategy to increase English students’ speaking skill and environmental awareness (see Manurung & Ria, 2018). To overcome this conceptual limitation, it is crucial to expand the scope of Eco-ELT to encompass and encourage all endeavors related to environmental praxis and research within ELT. Additionally, it is important to note that the concept of “Eco-ELT” proposed by Saiful (2020), lacks a solid philosophical foundation and fails to provide clear principles and frameworks for conducting research about environmental issues and implement environmental teaching in ELT. This absence of a well-defined concept and framework creates uncertainty among ELT researchers, practitioners, and teachers making them hesitant to incorporate and study environmental issues in ELT.

The present conceptual article aims to extend the concept of Eco-ELT proposed by Saiful (2014, 2020) by discussing its ontology, epistemology, and axiology standpoints. It also seeks to elaborate on the Eco-ELT principle and framework of practice in English lessons for the insights of ELT teachers and curriculum developers. It also elucidates the Eco-ELT research principle and area. Thus, the present study formulates the research questions as follows:

- (1) What are the philosophical grounds of the Eco-ELT: ontology, epistemology, and axiology?
- (2) What is the methodology of Eco-ELT implementation: the principles and frameworks of Eco-ELT practice and research?

This study expects that the complete elaborations of Eco-ELT could provide holistic understanding of Eco-ELT as a new area of research and practice within the ELT field, focusing on the issues of environmental sustainability. As a result, more Eco-ELT attempts are expected to emerge at local, national, and global levels to address environmental problems such as air pollution, climate change, biodiversity loss, oceanic pollution, and so on through ELT.

Method

This conceptual article, by nature, is a freestanding review, allowing for the exploration of diverse topics and proposing a new research agenda (Li & Wang, 2018). Through this flexible review approach, this article can discuss relevant and instrumental theories, studies, and practices that contribute to the development of Eco-ELT. Accordingly, this article could answer the research questions, providing thorough elaborations on the philosophical grounds and principles and frameworks of practice and research of the Eco-ELT.

Findings and discussion

This article presents the findings and the discussion based on the conceptual research questions: (1) what are the philosophical grounds of the Eco-ELT: ontology, epistemology, and axiology? and (2) what is the methodology of Eco-ELT implementation: the principles and frameworks of Eco-ELT practice and research?

What are the philosophical grounds of the Eco-ELT: ontology, epistemology, and axiology?

The ontology: what is Eco-ELT?

Ontology deals with understanding the “being” of reality and is considered as an object of scientific knowledge (Rokhmah, 2021). In this article, the focus of ontology is the concept of Eco-ELT itself. This section aims to elaborate the nature of Eco-ELT. The term “Eco-ELT” was initially coined and introduced by Saiful (2014). It refers to using environmental literary works in ELT to instill children’s love of the environment and virtues of local wisdom (Saiful, 2014). Saiful (2020) further deepens the Eco-ELT by elaborating on its concept under the approach of ecocriticism. It refers to using an ecocriticism approach in teaching environmental topics in ELT, employing any printed and digital literary works. Therefore, the “Eco” in the Eco-ELT represents the ecocriticism approach. This new operational definition of the Eco-ELT referring to the use of ecocriticism approach possess problems, particularly in practical implementation. It restricts the scope and flexibility of environmental teaching and research in ELT. Attempts at the teaching and research about environmental issues in ELT are diverse; they are not exclusively devoted to using the ecocriticism approach.

The present article emphasizes that instead of using “Eco” as a representation of an ecocriticism instructional approach, it would be more appropriate to use

“Ecology”. “Ecology is the science of the superindividual complexes of nature (life units or ecosystems) or the science of animals and plants as members of the whole of nature” (Friederichs, 1958, p. 158). This definition is becoming inclusive and comprehensive. It encompasses various meanings, such as the relationships between organism and environment, thinking and being as coexistence, interconnection and belonging (Cazeaux, 2017). It is also a cross-disciplinary engagement of knowledge from sciences to humanities which accounts for the local and global interrelationship of physical and biological Earth’s systems encompassing social systems, cultural values, traditions, technologies, and ideas populating planet: these reflect that ecology (Mickey, 2016).

The change from “Eco” to represent “ecology” reflects to the focus of the Eco-ELT movement on environmental issues that impacting all elements of ecosystems. This change allows for a broader range of approaches, models, and methods in environmental teaching and research in ELT, not restricted to the use of ecocriticism approach. In addition, the change also addresses the possibility of centering the ELT movements only on land-based environmental issues, especially if the movements are constructed within the term “green” ELT. Naming the environmental movements using “green” such as “green ELT” as seen in Jewett (2011), in the eyes of ecocritical movement by Dobrin (2021), could induce land-based thinking. This land-based thinking might develop publics’ misunderstanding that the contributions and participations of ELT are solely focused on land-based environmental issues, not oceanic ones. To avoid this misconception, the term “Eco” is more suitable than “green”, “blue”, and so on, to encompass the various environmental issues addressed within the Eco-ELT, including land, oceans, and the entire cosmos.

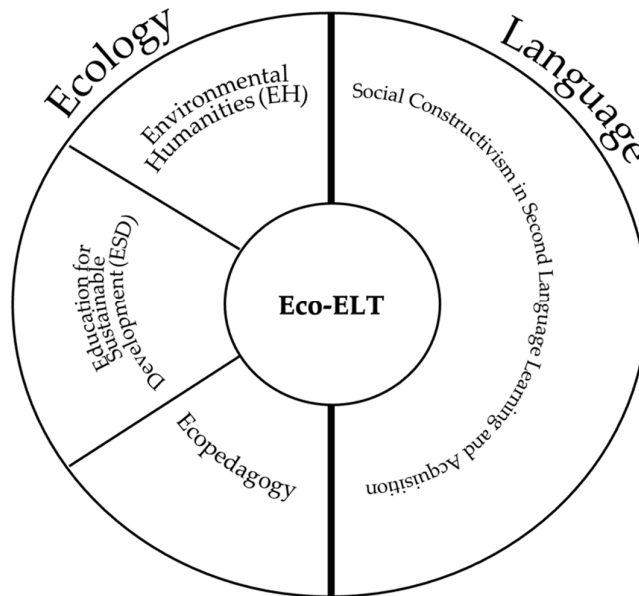
The present article maintains the use of the “ELT” to specifically refer to the environmental movement in the field of ELT, distinct from other academic disciplines like mathematics, history, geography, etc. ELT focuses on the teaching of English as a second (TESL) or foreign language (TEFL) and involves the process of mental language acquisition (Johnston, 2003). The TESL and TEFL are within TESOL, the teaching of English to Speakers of Other Languages. Therefore, the study and practice of the Eco-ELT can be applied any ELT context.

In conclusion, Eco-ELT within this extended conception simply refers to a study about environmental issues and practice of environmental teaching in ELT. The study and practice could employ diverse methodological research and instructional practice devoted to studying ecological issues and their implementation in ELT. As an umbrella term and concept, Eco-ELT can also be applied within all contexts of ELT, such as TESOL.

The epistemology: what are the bases of Eco-ELT?

Epistemology pertains to the foundation of scientific knowledge, the constituents of the “being” (Rokhmah, 2021). Thus, this section discusses the underlying principles of Eco-ELT, which is an interdisciplinary field combining environmental studies, second or foreign language learning and acquisition, and education. The present article presents four bases of Eco-ELT which generally can be broadly categorized in two parts illustrated in Figure 1: the language and the ecology. The language aspect includes social constructivism in second language learning and acquisition, while the ecology aspect encompasses environmental humanities, education for sustainable development, and ecopedagogy.

Figure 1
Eco-ELT bases



Social constructivism in second language learning and acquisition

Eco-ELT is firmly rooted in the social constructivism theory of second language learning and acquisition. Social constructivism emphasizes the roles of social interaction and cooperative learning in constructing learners’ knowledge or understanding of reality; this differs from cognitive constructivism, which concerns learners’ capability to build reality (Brown, 2014). In the context of language learning and acquisition, the development of English proficiency among learners is not solely dependent on their internal capabilities. It also relies

on external factors that can be facilitated through interactions and cooperation. These interactions and cooperative efforts should not only involve humans such as English teachers, classmates, parents, and native English speakers, but also non-human elements like English textbooks and learning materials. All these elements, both human and non-human, plays a crucial role in providing inputs for English learners' language acquisition and learning process (Brown, 2014).

Technology can also be a tool for interaction and cooperation for developing English learners' language learning and acquisition. It provides new and numerous language learning options through interactive tasks delivered through CD-ROMs, Web pages, and communication software on the internet, giving exposure to the target language use and acquisition (Chapelle, 2007). It helps to "create a learning experience where social interactions and self-expression take on a central role in the development of second language proficiency" (Stockwell, 2022, p. 16). Additionally, instruction, whether it is non-interventionist (natural or *meaning-focused instruction*) or interventionist (direct teaching of specific language forms), can also be an avenue for language acquisition and learning (Ellis & Shintani, 2014). Thus, we can see various factors other than the learners' internal capability that can help learners achieve English proficiency.

Eco-ELT offers a wealth of high-quality external factors for language learning and acquisition. Authentic environmental texts are ubiquitous. They serve as valuable resources of learning materials for students to interact with and become sources of students' language learning and acquisition. They provide students with comprehensible inputs in English, facilitating their understanding of grammar, vocabulary, and sentence structures within meaningful contexts. Furthermore, the environmental activities conducted in Eco-ELT classes serve as avenues to enhance learners' English language skills (listening, reading, speaking, and writing). Examples of such activities include critical reading, environmental nature writing, eco-debates, eco-drama, and so forth which can be modelled as non-interventionist or interventionist approaches to encourage meaningful English language acquisition and usage. Additionally, information and communication technology (ICT) can be effectively integrated into the Eco-ELT practices using environmental news, blogs, YouTube Videos, eco-media, and other digital resources. These ICT tools can serve as catalysts for improving language learners' proficiency in English. In short, Eco-ELT offers vast possibilities for language learning, acquisition, and use to flourish and thrive.

Environmental humanities

Eco-ELT is aligned with the nature and mission of environmental humanities, aiming to establish itself as an inclusive and interdisciplinary concept.

environmental humanities (EH) is an interdisciplinary field of study that researches environmental problems and the meanings of a good life for all living beings through the lens of the arts and humanities (Hubbell & Ryan, 2022). Due to its interdisciplinary nature, EH integrates various scholarly disciplines including philosophy, arts, media studies, literature, film, history, anthropology, theater, and so on, which revolve around sustainability and nature research (Rodewald, 2022). These disciplines collaborate to address global environmental crises that cannot be solely solved by the sciences (Emmett & Nye, 2017).

Eco-ELT, which refers to a study about environmental issues and practice of environmental teaching in ELT, shares the nature and mission of the interdisciplinary research of EH. Eco-ELT research and practice could cover any environmental approaches under EH, such as ecocriticism, sustainability, ecomedia, theater, arts, animal, and plant studies. In research, researchers could use these approaches and examine their impacts on English learners' and teachers' relationship to nature and pro-environmental behaviors. For instance, a study by Matthewman (2017) employed an ecocriticism approach in ELT. It revealed that the approach could enhance students' cultural and ecological identities and provide teaching insights for teachers within specific cultural and environmental contexts. Another study is from Putri (2018). She employed digital storytelling (DST) and revealed that DST is a powerful campaign tool against environmental destruction which can promote English pre-service teachers' ecocritical thinking and solutions to local environmental problems.

In practice, English teachers and curriculum developers could employ EH approaches in Eco-ELT instructional activities. The use of EH approaches enable students grasp the underlying causes and intricate nature of environmental problems, as well as reflect on the meaning of life as humans in this Anthropocene era. A wide array of environmental activities under the arts and humanities can be integrated in English lessons, including drama, theater, creative writing, analyzing and appreciating movie, nature writing or ecomposition, debates, speeches, and critical reading. By situating these activities within environmental learning, students can explore and engage in ecocritical discussion on the human-nature relationship.

Education for sustainable development (ESD)

The Eco-ELT movement also aligns with the principles and objectives of education for sustainable development (ESD). ESD is rooted in the implementation of sustainable development acts in education. It is also interwoven with sustainable development goals (SDGs) and integrates and balances out three sustainable development (SD) pillars, including economic,

social, and environmental (Villanen, 2014) in every educational-related action. The focus works of ESD are also improving the quality of the environment for sustainability (Anyolo et al., 2018) and “creating new perspectives on the habitat through the prism of interrelations among nature, economy and culture” (Suleimenova & Ivanova, 2018, p. 46).

Eco-ELT shares a similar orientation with ESD, focusing on developing students' and teachers' awareness of and connection with nature, as well as promoting values and behaviors that contribute to environmental sustainability. This alignment with nature and mission of ESD is acknowledged by Bowden (2010) who emphasizes this potential of the ELT field to integrate and address sustainability issues. In line with this, Jodoin (2022) offers a model called “language education for sustainable development” or LESD, which further supports the integration of SDGs within language education, including ELT.

LESD's fundamental mission is to alter the current model of ELT to be more concerned with the use of the English language to empower future leaders to achieve SDGs goals (Jodoin, 2022). LESD has two specific aims: providing avenues for developing students' communication ability and facilitating the enhancement of students' understanding of global complex interrelated issues (Jodoin, 2022). It has a SCOPE framework which stands for “Student-centered,” “Critical thinking,” “Offer feedback,” “Practice and demonstrate,” and “Educate others”: this framework is to challenge student values, beliefs, and norms (VBNs) about their place in the world (Jodoin, 2022). Eco-ELT, which is propounded to facilitate all types of attempts at environmental teaching and research in ELT, supports this model of LESD. LESD also aims to address environmental problems under SDGs, aside from economic, and social issues of SDGs. Researchers and practitioners of Eco-ELT, which take the road of LESD to teach and study environmental issues in ELT, are welcomed.

The Eco-ELT, which shares the same mission as LESD to address global environmental issues, still has fundamental differences. First, Eco-ELT is an umbrella term and concept to cover all attempts at environmental teaching and research in the field of ELT, including LESD. As such, the practices associated with LESD, which focus on environmental issues, are considered integral components of the broader Eco-ELT movements. Second, Eco-ELT encompasses various approaches, strategies, or methods to environmental teaching, which include those that do not use transformational learning, such as a teacher-centered approach or a fully student-centered approach. Unlike the characteristics of LESD, which emphasize a student-centered approach, Eco-ELT recognizes that teaching English and content does not always lend itself to successful or appropriate use of a student-centered approach, particularly in

rural areas. A study by Saiful and Triyono (2018) revealed that teacher-centered learning is not necessarily outdated or ineffective for English teaching approach, especially in rural areas where limited resources and facilities are prevalent. The study also highlighted that students heavily relied on teachers as sources of knowledge for learning English. Therefore, restricting environmental teaching solely to a student-centered approach would hinder the advancement of the environmental movements in ELT. English teachers should have the flexibility to teach environmental issues based on their specific contexts, taking into account school, student, and society conditions.

Ecopedagogy

Eco-ELT is also grounded based on the principles of ecopedagogy, which aims to dismantle educational systems that contribute to socio-economic inequality, planetary unsustainability, and anthropocentric dominancy over nature (Misiaszek, 2022). Following the Ferarian principle, ecopedagogy encourages a holistic view of the world, considering the Earth and all entities as interconnected; its goal is to provide students with a deeper understanding of environmental violence (Misiaszek, 2022). In addition, ecopedagogy challenges the prevailing models of ESD and environmental education (EE), which prioritize the “development” to get “progress” of sustainability, yet, deprioritizing environmental well-being, neglecting the power of “reading” social injustices which are the sources of environmental violence and the politics of development frameworks (Misiaszek, 2020).

Eco-ELT is an inclusive concept that encompasses all efforts to teaching and researching environmental issues in ELT. It appreciates and welcomes the principles of ecopedagogy, but also recognizes the contributions of ESD and EE. Eco-ELT emphasizes that even the simplest forms of environmental engagement, such as nature appreciation, are valuable and deserving of recognition and support. It does not prioritize one model over another but instead embraces and encourages any attempts to address global environmental issues through ELT.

The axiology: what are the significances of Eco-ELT?

Axiology deals with the values and benefits derived from scientific knowledge (Rokhmah, 2021). In this article, it is the importance of Eco-ELT. Saiful (2020) urges that Eco-ELT's goals are to make English learners linguistically and intellectually developed, socially and emotionally shaped, and create “green” moral English teachers who are pro towards environmental sustainability. Linguistics development does not mean ecological teaching in ELT benefits only for enhancing students' linguistic competence but also for developing students'

English language skills: listening, speaking, reading, and writing. The word “linguistically” is used to maintain consistency with other descriptive terms such as “intellectually”, “socially”, and “emotionally”, and to facilitate ease of pronunciation and memorability. This language competence and skills further contribute to students’ ability to communicate. Consequently, Eco-ELT can serve as a platform for the enhancement of students’ communication skill.

The communication skill itself is contextualized within the skill under the Inner Development Goal (IDG) framework. IDG framework consists of 23 skills and qualities necessary for empowering individuals to successfully address complex issues identified by the UN’s Agenda 2030 and 17 sustainable development goals (Inner Development Goals, 2021). The communication skill in the eyes of IDG is an “ability to really listen to others, to foster genuine dialogue, to advocate own views skillfully, to manage conflicts constructively and to adapt communication to diverse groups” (Inner Development Goals, 2021, p. 21). Eco-ELT can potentially develop students’ abilities to communicate in English, encompassing five micro-skills. The first is the ability to express ideas in English. The second is the ability to respect/pay attention/ really listen to others when others communicate in English. The third is the ability to initiate English dialogues. The fourth is the ability to deal with conflicts during English communication, such as lack of comprehension about the topic or forgetting about vocabulary during communication. The last is the ability to use English pragmatically (appropriate to the backgrounds of the interlocutors).

The implementation of Eco-ELT also contributes to the development of students’ intellectual capacity. In this context, Eco-ELT has the potential to broaden students’ thinking spectrum concerning environmental issues. This includes fostering knowledge acquisition, shaping beliefs, cultivating critical, creative, and systems thinking, shaping worldview, perspective, and vision, promoting long-term orientation, and fostering inclusive mindset, among others. English classrooms are appropriate for intellectual and philosophical discussions on the environment (Beigel, 1996), which can expand students’ perspectives and understanding of environmental issues. Consequently, while learning about environmental topics in English lessons, students can gain a deeper comprehension and may undergo a transformative shift of their mindset towards environmental issues. This transformation in thinking is crucial in establishing positive student-nature relationships and promoting pro-environmental behavior, as our actions in life are often influenced by our thoughts. The potential for such transformative change in students’ thinking spectrum within Eco-ELT practices is substantial.

Eco-ELT instruction also offers opportunities for the development of students' social-relation skills, such as collaboration, cooperation, and social awareness. For instance, through project-based learning on environmental issues, students can learn to work together in teams, fostering collaboration and cooperation. This project activity also increases students' awareness of ecological problems that impact the well-being of communities and nonhuman beings. Furthermore, Eco-ELT instruction supports the development of students' emotional well-being. As they learn about environmental issues, students engage with complex information, gaining insights into the causes, consequences, and interconnectedness of ecological disasters for humans and nonhumans. This exposure can cultivate a sense of unity and interconnectedness with all entities or organisms on Earth, reshaping students' understanding of the meaning of life as coexisting beings in the Anthropocene era. Moreover, engaging in environmental appreciation activities within Eco-ELT instruction can elicit a range of emotions, such as gratitude, pride, peace, and happiness. Thus, Eco-ELT instruction offers a diverse spectrum of emotional development opportunities.

In addition to the profound benefit, it provides for the students, Eco-ELT instruction also aims to shape English teachers to be "green" moral teachers who are pro towards environmental sustainability actions (Saiful, 2020). To avoid any land-based connotations due to the term "green" (Dobrin, 2021), this study changes the term "green" into "eco" representing ecological morality. So, what does ecological morality mean in this context? Teachers are key change makers of civilization. They are one of the front liners in nurturing and shaping future citizens. Existing language teaching and general education literature also highlights teachers as transformative intellectuals, who strive for educational advancement and personal transformation of themselves and students, addressing numerous forms of inequality and injustice in society and transforming learners' life inside and outside the classroom (Kumaravadivelu, 2003). Hence, by implementing Eco-ELT instructions, English teachers will develop their comprehension of environmental issues and pedagogical practices. This comprehension constructs the teachers' ecological sensitivity, enabling them to promote sustainability in their own lives and English classrooms, preparing future citizens (English students) to engage in environmentally sustainable practices. This is where English teachers demonstrate ecological morality becoming an environmental agent of change through Eco-ELT. The more English teachers incorporate Eco-ELT instruction, the better it will be our Earth. Eco-ELT moral teachers also transform the use of English in the context of environmental activism. For instance, they provide activities that allow students to use English to communicate or mobilize the public in protecting nature and its contents.

In short, Eco-ELT offers considerable benefits for both English students and teachers. For English students, Eco-ELT contributes to the development of four qualities and skills domains: linguistics/language, intellectuality, social, and emotion. For English teachers, Eco-ELT empowers them to embrace an eco-moral stance, becoming agents of change who embody sustainable behaviors in their own lives and promote environmental movements within their English classrooms. These benefits are summarized in Table 1.

Table 1
The significance of Eco-ELT

Eco-agents	The domain of qualities and skills possibly to develop	The qualities and values
English students	Linguistics/language	Language components (grammar, vocabulary, pronunciation), skills (listening, reading, speaking, and writing, and communication skill).
	Intellectuality	Thinking spectrum related to the environment, such as knowledge, belief, thinking (critical, creative, and systems thinking), worldview, perspective, vision, long-term orientation, inclusive mindset, etc.
	Social	collaboration, cooperation, social awareness, and so on.
	Emotion	feelings of oneness or unity to the Earth and its entities, gratefulness, pride, peace, happiness, and so on.
English teachers	Eco-morality	implement sustainable behaviors in life, carry out environmental movements in English classrooms, and transform the function of English for environmental activism.

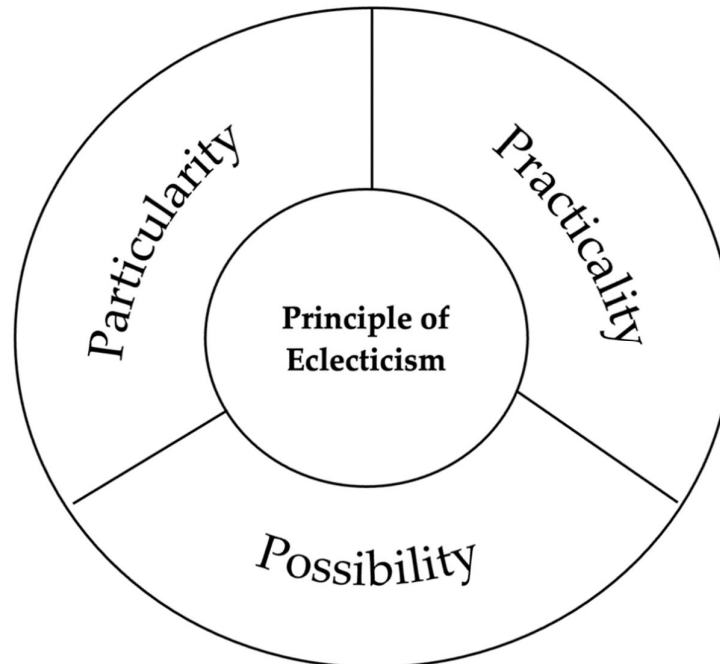
What is the methodology of Eco-ELT implementation: the principles and frameworks of Eco-ELT practice and research?

Methodology: how do we implement Eco-ELT?

This section elaborates the principle and framework of Eco-ELT implementation. It also explicates the principle and area of research on Eco-ELT.

Eco-ELT practice: principle

There is no universal solution that can address all language teaching challenges. Each language teaching context is unique, and no single approach or method can be considered ideal for all situations (Arikan, 2006). Consequently, Eco-ELT practices embrace the principle of eclecticism, which allows for the design of instructions using various approaches, methods, techniques, and so on. The key criterion for selecting these elements is the appropriateness to the specific teaching context, including factors such as learners, classroom settings, curriculum, and so forth. Eco-ELT practices adhere to the principle of eclecticism and adopt the post-method pedagogy framework outlined in Figure 2.

Figure 2*Eco-ELT principle of practice*

Post-method pedagogy refers to pedagogical practices which "(a) facilitate the advancement of a context-sensitive language education based on a true understanding of local linguistic, sociocultural, and political particularities; (b) rupture the reified role relationship between theorists and practitioners by enabling teachers to construct their own theory of practice; and (c) tap the sociopolitical consciousness that participants bring with them in order to aid their quest for identity formation and social transformation" (Kumaravadivelu, 2001, p. 537).

Post-method pedagogy encompasses three parameters: particularity, practicality, and possibility (Kumaravadivelu, 2006). Pedagogy of particularity emphasizes the importance of understanding the unique characteristics of the classroom and social context situations when implementing language teaching (Arikan, 2006). Eco-ELT practices align with this particularity parameter, as they are highly dependable to specific situations and social contexts of English instructions. For instance, it is not feasible to implement communicative language teaching uniformly in all English classes and contexts, including in rural areas. Rural education faces numerous challenges such as a lack of resources and facilities, and hence students still rely heavily on teachers as a source of knowledge, and pedagogical practices of ELT are teacher centered (Saiful & Triyono, 2018). Imposing communicative language teaching in such a context presents challenges. However, ELT teachers who understand that the teacher-centered approach is more suitable for this particular rural pedagogical context can still utilize the approach to teach environmental topics in ELT. These ELT teachers who employ this approach deserve recognition and support.

Pedagogy of practicality involves the integration of theory and practice as well as the autonomy of the teachers to construct and regulate their own context-sensitive theory of practice (Arikan, 2006). It focuses on teachers' actions and reflections grounded on their intuition and insights to perform language pedagogy (Arikan, 2006). Similarly, Eco-ELT practices also uphold this parameter of practicality. Eco-ELT teachers need to be critically aware of local learning and teaching conditions suitable for environmental teaching in ELT. They have autonomy to construct and monitor their own approach to teaching environmental topics in ELT based on their teaching contexts. They also have the flexibility to design curriculum, materials, and instructions that combine all approaches of environmental education, such as critical, religious, and sustainability approaches, on condition that they are suitable for their contexts of teaching. This demonstrates the connection between the pedagogy of practicality and particularity discussed earlier.

Pedagogy of possibility is rooted in critical pedagogy which seeks to challenge oppressive conditions in everyday situations (Arikan, 2006). This parameter acknowledges and highlights students' and teachers' agency and empowers them to challenge the status quo that favors inequalities. In line with this, Eco-ELT also embraces this parameter to decolonize the Earth, bringing back the life practices that emphasize the well-being of the Earth. Eco-ELT encourages teachers and learners to question and perform actions to social, economic, and political dominance that destroy the well-being of Mother Gia. Eco-ELT teachers and curriculum designers are encouraged to develop and implement learning

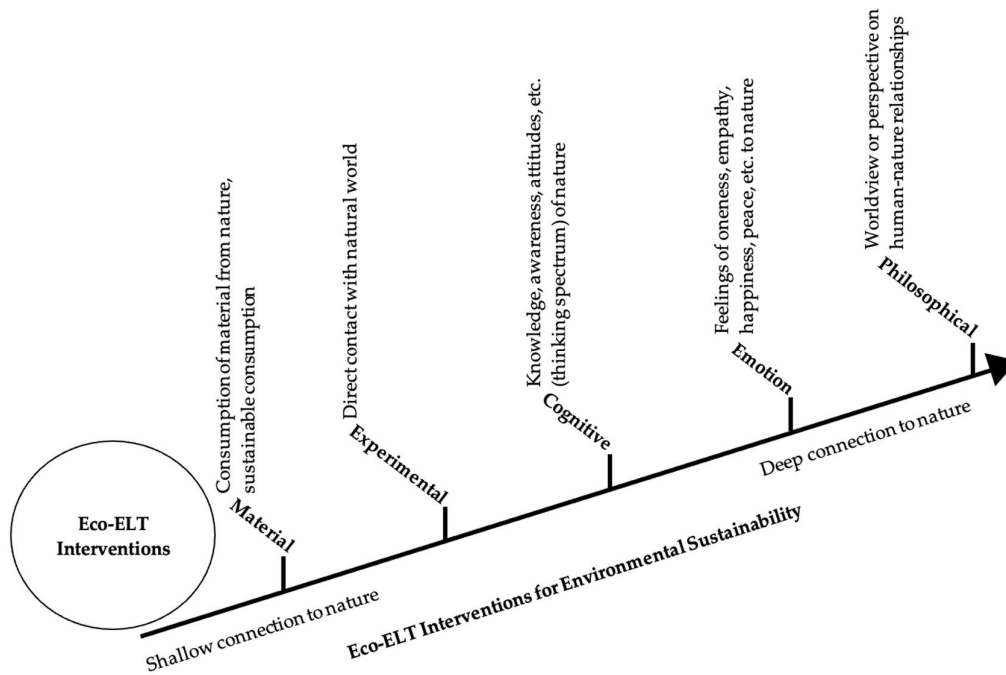
activities that foster an understanding of and tackles the environmental inequalities within English instructions.

Eco-ELT practice: framework

To achieve environmental sustainability in Eco-ELT practice, the present conceptual article provides a framework of practice for Eco-ELT teachers, curriculum designers, and policymakers. The framework is developed based on the concept of leverage point system of nature connectedness proposed by Ives et al. (2018). The leverage point system helps inform necessary sustainability interventions benefit for building humans' relation to nature. Eco-ELT adopts this framework to enhance and strengthen humans' connection to the Earth and its contents to solve ecological catastrophes. The framework is visually presented in Figure 3 and further elaborated in the subsequent paragraphs.

Figure 3

Eco-ELT framework of practice



Note. Figure 3 is adapted from the system leverage points of nature connection intervention. “Reconnecting with nature for sustainability,” by C. D. Ives, D. J. Abson, H. Von Wehrden, C. Dorninger, K. Klanięcki, & J. Fischer, 2018, *Sustainability Science*, 13, p. 1393. <https://link.springer.com/article/10.1007/s11625-018-0542-9>

Figure 3 illustrates the mechanism of Eco-ELT interventions to reconnect people to nature, bringing people from a shallow to a deep connection to Earth

(Ives et al., 2018). This intervention system is designed to be practical and can work in concert: interacting with one another (Ives et al., 2018). In order to ensure that Eco-ELT movements have a significant impact on environmental sustainability, Eco-ELT teachers, curriculum designers, and policymakers have the opportunity to select and design Eco-ELT activities or programs that align with these five intervention types. The first is “material,” which involves consuming natural materials or goods. Eco-ELT intervention can be in activities that encourage English students to comprehend and do sustainable consumption. The second is “experiential,” which focuses on direct interactions between humans and the natural environment. Eco-ELT intervention can be devoted to designing activities that immerse students and teachers in direct contact with the natural environment.

The third intervention type is “cognitive,” which involves enhancing humans’ knowledge, awareness, or attitudes to nature. Eco-ELT intervention in this category can consist of activities that aim to develop students and teachers’ awareness, knowledge, and attitudes to nature. The fourth type is “emotion,” which focuses on interventions that work on the emotion of humans toward nature, such as feelings of oneness or empathy for nature and its contents. Eco-ELT intervention can be in the forms of activities that shape or develop students’ feelings of oneness or empathy for nature and its contents (all living and non-living organisms). Emotions encompass wide range, including feelings of happiness, appreciation, peace, and so on, and Eco-ELT intervention can also focus on nurturing these emotions. The fifth type is “philosophical,” which revolves around humans’ worldviews or perspectives about humans’ relationship to nature. Eco-ELT intervention could involve activities that shape, develop, or transform students’ worldviews or perspectives about their relationship to nature. It is important to emphasize that the human-nature relationship should not be based on master-servant dynamic but rather on equality and egalitarianism.

Eco-ELT research

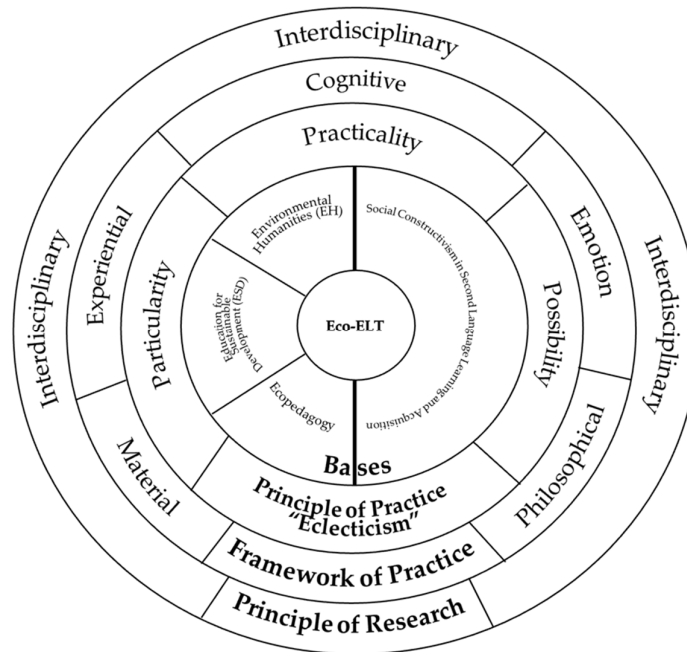
Interdisciplinary study blends knowledge from various disciplines within a scope of a single project (Hubbell & Ryan, 2022). In line with this principle, Eco-ELT adopts an interdisciplinary approach to research. The Eco-ELT researchers can investigate various aspects related to environmental teaching and learning, such as the qualities and language components and skills of English students and teachers. Besides, they can also research the instructional materials, curriculum, policy, assessment, etc., related to environmental issues in ELT. They have flexibility to explore both ecological issues and English proficiency in English

educational practices spanning all levels, across different settings (formal, informal, or nonformal education), and within various ELT contexts (TESL, TEFL, TESOL, etc.).

Here are a few examples of Eco-ELT research. Akcesme (2013) and Bland (2014) conducted studies examining the representation of nature in ELT coursebooks and literary texts worldwide. Their research shed light on how nature is portrayed and discussed in these materials. Matthewman (2017) investigated the application of ecocriticism ELT in two secondary schools in South Auckland. The study revealed that this approach could inform learners' cultural and environmental identities and provide teaching insights within specific cultural and environmental contexts. Besides, Putri (2018) designed environmental advocacy activities using digital storytelling in English lessons. They study found that these activities successfully develop students' environmental awareness and empowered them to contribute to solve local environmental problems.

Above all, the overall outlook of Eco-ELT as a stream of ELT research and practice about environment is presented in Figure 4.

Figure 4
Eco-ELT outlook



Conclusion

The present conceptual article extends the concept of “Eco-ELT” and proposes Eco-ELT as a novel area of research and practice within the field of ELT. The present article has discussed the philosophical grounds underpinning Eco-ELT, namely the anthology, epistemology, and axiology. Eco-ELT is defined as the study of environmental issues and practice of environmental teaching in ELT. The study and practice could employ diverse methodological research and instructional practices devoted to studying natural environmental issues and their implementation in ELT. The foundation of Eco-ELT comprises two important elements: language and environmental studies and education. The language element includes social constructivism in second language learning and acquisition, while the environmental studies and education element draws on environmental humanities, education for sustainable development, and ecopedagogy.

Eco-ELT offers significant advantages in enhancing various aspects of English students’ development, including linguistics/language elements, intellectual growth, and social and emotional intelligence. Additionally, it contributes to fostering ecological morality among English teachers, empowering them to be environmental advocates and agent of change. By embracing Eco-ELT principles, English teachers adopt sustainable behaviors in their personal lives and promote environmental initiatives in English classrooms. They also redefine the role of English language instruction by using it as a means to drive environmental activism.

In addition to the benefits for students and teachers, the implementation of Eco-ELT should be guided by the principle of eclecticism and align with the parameters of post-method pedagogy, which include particularity, practicality, and possibility. To achieve environmental sustainability through ELT, Eco-ELT practitioners, including teachers, curriculum designers, and policymakers can employ one or two or a combination of the five Eco-ELT interventions. These intervention dimensions encompass material, experiential, cognitive, emotion, and philosophical dimensions.

Eco-ELT research inherently adopts an interdisciplinary approach, focusing on studies about environmental sustainability in ELT at all levels of education, settings (formal, informal, or nonformal education), contexts (TESL, TEFL, TESOL, etc.), and forms (the instructional activities and materials, curriculum, policy, assessment, etc.). Further studies are highly encouraged to leverage the transdisciplinary nature of Eco-ELT research to investigate any environmental sustainability praxis within ELT across different educational levels, settings, contexts, and forms. Ultimately, Eco-ELT is expected to contribute as one of the

solutions to ecological catastrophes. Significantly, through Eco-ELT, the contributions and participations of the ELT field in addressing environmental crises are well-organized, strongly reaffirmed, and advanced.

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