Implementations Of Eco-Literacy in English Language Teaching for Smart Society Era: A Critical Review

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Abstract

Language and environment are related to one another. Languages affect how people perceive the world, how they behave, and how they interact with their local political, social, and ecological settings (Meighan, 2023). According to the new ideas, eco-literate students prepared to be an effective member of a sustainable society. ELT scholars and teachers must create, assess, and put into practice pedagogical techniques that promote ecological sustainability. However, no previous study has investigated implementations of Eco literacy in ELT in any systematic way. This review aimed to describe a general overview of implementations and opportunities of eco-literacy in ELT to help students facing Smart Society. Specific research studies were located using the predetermined criteria in Google Scholar databases, where the study was conducted. The outcomes include the following implementations, Eco-literacy benefits students in a smart society, requiring skill development and innovation, promoting creativity, encourages critical thinking about environmental issues and language use, fostering a shared understanding of alternative, attracting educators and curriculum developers interested in incorporating it into teaching materials.

Keywords: *Eco Literacy, English Language Teaching, Smart Society.*

Introduction

What is a Smart Society? "A human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space". The 5th Science and Technology Basic Plan outlines the vision of a Smart Society as the future ideal for Japan, building upon previous societal models such as the hunting society (Society 1.0), agricultural society (Society 2.0), industrial society (Society 3.0), and information society (Society 4.0). The Smart Society envisages several key elements: (a) A shift towards value creation over mere efficiency, focusing on meeting individual needs, problem-solving, and value generation. (b) Encouragement of diverse talents and abilities, where imagination plays a crucial role in identifying societal needs and transforming them into tangible ventures. (c) Ensuring equal access to opportunities for all, including those from disadvantaged backgrounds or remote areas, enabling them to pursue education and employment. (d) Creating a peaceful environment where individuals can live without fear, enhancing resilience against physical threats like terrorism and disasters, as well as cyber-attacks, and strengthening safety nets for unemployment and poverty. (e) Promoting harmony with nature, fostering a society where people can coexist with the environment in balance - There will be alternatives for living in harmony with nature not only in large cities, but

also in a variety of regions. (Nakanishi, H., & Kitano, H, 2018). Smart Society actualization is in line with The Sustainable Development Goals (SDGs), which aim to regulate both the environment and natural resources in a sustainable way, including environmental development as one of their pillars.

Understanding ecological principles, known as eco-literacy, plays a vital role in mitigating environmental degradation and equipping individuals with the knowledge to implement sustainable development practices. Environmental education aims to raise public awareness and foster a sense of responsibility in addressing and preventing environmental issues. Recognizing that the environment is integral to human existence and interconnected with all living organisms, it emphasizes the mutual dependence between humans and the environment. This mutual reliance underscores the importance of harmonious coexistence, as humans depend on the environment for various resources, while environmental well-being is influenced by human activities (Nugraha et al., 2022).

In order to prepare students for Smart Society, it is important for them to have Eco literacy. There's a notion that "Over the last 50 years, expectations for a literate citizenry have been extended to include the ability to understand, make informed decisions, and act with respect to complex topics and issues facing society today" (McBride et al, 2013). An individual who is eco-literate is equipped to contribute effectively to an environmentally conscious society, possessing comprehensive abilities encompassing cognitive, emotional, practical, and spiritual aspects. This includes a deep understanding of the natural world and active involvement in it. In the context of English Language Teaching (ELT), the English language serves as a versatile tool used across diverse contexts to articulate various viewpoints and narratives in global discussions, facilitating the dissemination of new ideas (McBride et al., 2013). Addressing environmental issues in ELT classrooms is one of the ways to develop students' Eco literacy. This review aimed to describe a general overview of implementations and opportunities of eco-literacy in ELT to help students facing Smart Society.

Method
Search Strategy and Selection Criteria
The methodology adhered to the PRISMA guidelines for systematic reviews and meta-analyses. Relevant research studies were identified through Google Scholar databases and Harzing's Publish and Perish. The search was limited to articles published between 2016 and 2022, with a focus on recent publications. Additionally, only articles written in English were included in the review process.

Search Terms
To obtain only relevant research studies, the following combination phrases were utilized to search the papers: Eco-linguistics, sustainability, environment and nature. These were paired with materials, English Language Teaching, and Smart Society.

Application of Inclusion and Exclusion Criteria
Based on the inclusion and exclusion criteria, the discovered research studies needed to be further evaluated. In terms of inclusion criteria, the focus was on experimental, English-language, peer-reviewed journal publications published in open-access journals. Furthermore, the Eco- Linguistics materials had to be implemented and evaluated. No surveys, theoretical studies, reviews, conference proceedings, abstract papers, posters, presentations, scientific event programs, literature reviews, book reviews, editorials, or

unknown sources were included in the analysis. The criteria were selected by the authors of this study to ensure that the activities were assessed in real-world settings. Additionally, non-open access articles and articles written in languages other than English were excluded from consideration.

Synthesis Strategy

The papers underwent examination to assess their relevance to this study. Initially, a search in the Google Scholar databases yielded 200 articles. However, after applying the inclusion and exclusion criteria, only five articles were deemed suitable. These articles, meeting all specified terms and criteria, underwent a systematic review process. Additionally, there were descriptive articles aimed at presenting materials.

Results

The research results presented in this work are particularly intriguing because they may serve as a solid basis for future studies on the intercultural dimension in various higher education EFL contexts and as a general guideline for upcoming efforts to develop eco-literacy curricula, syllabi, courses, and/or teaching resources.

Table 1. An Overview of the Key Findings from the Detected Studies

Study (author, year, country)	The objective of the study	Research sample	Materials	Outcome measures	Findings
Yahya, L., & Prakash, A. (2020)	To investigate Indigenous participants' perspectives on In4d-Indigenous CIY nature journaling. Identifying the difficulties in writing nature journals To investigate how nature journaling may have influenced participants' creative writing in nature journaling.	This study included 29 Indigenous undergraduates (N=6 male, 23 female) pursuing a Bachelor of Education in Iban Studies.	Nature journaling enhances creative, critical thinking, and character development in Indigenous CIY participants, connecting technology-aided outdoor learning with nature.	In4d-Indigenous nature journaling promotes creative writing through six themes: learner autonomy, language learning, risk-taking, technology exploration, and creative-aesthetic value.	Study explores creative writing learning through In4d-Indigenous CIY nature journaling.
Yadnya, I. B. P.,	For generating an example of	The validation sheet, a	According to the study's	The text uses English	Text enhances ecoliteracy

Simpen, I. W., & Satyawati, M. S. (2021)	an English reading text using ecological or environmental lexicons.	questionnaire sheet, and a documentation instrument were the study's instruments.	findings, there are four types of English reading texts based on ecoliteracy lexicons.	reading text-based marine lexicons from Jempol Beach and Goa Beach, historical architecture lexicons from Dalam Loka and Bala Puti Palace, marine archipelagos lexicons from Moyo and Ngali Islands, and traditional farmland lexicons from Orong and Uma.	understanding for senior students through practice and expansion.
Micalay-Hurtado, M. A., & Poole, R. (2022)	This article discusses eco-CLA, an ecolinguistics-informed approach to English language instruction, emphasizing social, linguistic, and environmental justice, and presenting five principles for ELT applications.	The CLA approach to English language teaching (ELT) is flawed because it fails to recognize and account for the urgency of climate change and its numerous effects on current and future generations of learners.	Eco-CLA approach integrates ecolinguistics, CLA, social, linguistic, environmental justice in English language instruction.	An eco-CLA approach to ELT that can be used in a variety of language learning contexts.	As English language teachers, we must acknowledge our role in the crisis and work to make the world a more sustainable and just place. We can contribute to a more just and sustainable future for all by leveraging our expertise as applied linguists, ecolinguists, and language teachers.
Jayantini, et. al	The study's goal is to	Conducting a field study,	the verification of	The emphasis is	The findings of this study will

(2022)	identify local wisdom values that can be discussed when English department students are asked to analyze and write texts containing local terms or values.	interviews, and Focus Group Discussion (FGD) for the development to ensure the research's validity	native wisdom in their educational elements.	on various types of lexicons and expressions that contain local wisdom and meaningful values found in the natural landscape of Bukit Demulih (Demulih hill), Bangli regency.	be used to supplement teaching materials and develop learning activities in the Discourse Analysis course at Universitas Mahasaraswati Denpasar's English department.
Meighan, P. J. (2023)	HLP aims to reconnect the dots between languages and place-based knowledge. The article demonstrates how HLP and transepistemic language education enable learners and educators to engage in decolonial and pluralistic language, knowledge, and world sharing for more equitable and sustainable ELT.	Epistemological learning	Encourage the study of dominant languages like English, because tongues do not exist in vacuums and do not cause harm in and of themselves. 'It is not the English language that hurts me, but what the oppressors do with it, how they shape it to become a territory which limits and defines, how they turn it into a weapon that can shame, humiliate, and colonize,' says bell hooks.	In order to ensure more sustainable futures, equitable validation of all languages and knowledge systems, including Indigenous and minority languages, is required in ELT.	HLP, or transepistemic language education, challenges dominant Western models and assumptions to address colonialingual epistemic injustices and pedagogies in English. It promotes transepistemic dialogue on sustainability issues by encouraging non-hierarchical knowledge co-creation.

Table 2. The implementations of eco-literacy in ELT in detected studies

Yahya, L., & Prakash, A. (2020)

The researchers were drawn to outdoor learning to rekindle passion toward creative writing using a novel approach given the culture of being in touch with nature among the Indigenous undergraduates: Indigenous Create-It-Yourself Nature Journaling (In4d Indigenous CIY Nature Journaling) was inspired by nature. The In4d-Indigenous CIY Nature Journaling is a cutting-edge method for improving creative writing abilities. It was created to combine nature and natural surroundings as an outdoor learning setting for learning English. If the CIY (Create-It-Yourself) nature journaling was the key to unlock it, then the In4d-Indigenous was the spark that ignited ideas. The linking of locational factors, assimilation of experience, discovery, facilitation, and cultivation of observational abilities, with the potential to build Naturalist Intelligence, are all aspects of nature journaling. It serves as an outlet for the students' relationship with the natural environment.

The activities were Paint My language, Photography Story Collage and My dry garden (If a teacher is a Gardener). Students engaged with the activities, came up with ideas, and then communicated those ideas while immersed in nature and the campus's surroundings to effectively produce their journals. The participants were faced with a challenge when creating the journal, but they found creative solutions to get through it.

Yadnya, I. B. P., Simpen, I. W., & Satyawati, M. S. (2021)

The reading material for high school English students in grade X is included in the English reading text model created during this study. Three criteria are used in this study's instructional reading materials, which were prompted by reading skills in the 2013 English curriculum book. The teaching resources for reading in English books that were developed for the study included a variety of Eco literacy lexical subjects based on the aforementioned criteria. The subjects for the Eco literacy lexicon were chosen with consideration for environmental issues learners encounter on a daily basis. The lexicon used in this study is an application of the theoretical lexicography idea, which attempts to explore language and gather vocabulary in terms of the Sumbawa community's culture, customs, environment, social, arts, language, and belief system. The information on each topic was concise and helpful for classroom English language instruction.

    a. English Reading Text Based-Beaches Marine Lexicons, namely in the form of topics on the lexicon of Jempol Beach, Goa Beach, and Matti Mindai Beach.
    b. English Reading Text Based-Historical Architecture Environment Lexicons, namely the lexicon Dalam Loka Palace and Bala Puti Palace.
    c. English Reading Text Based- Marine Archipelagos Environment Lexicons, including the lexicon of Moyo island and Ngali island.
    d. English Reading Text-Based- Traditional Farmland Environment Lexicons, namely the lexicon of Orong, and Uma lexicons.

Micalay-Hurtado, M. A., & Poole, R. (2022)

The authors offer an assignment created for an English for Academic Purposes (EAP) writing course for authors of English as a second language as their first pedagogical example. The assignment requires students to create and compile a collection of texts from social media sites like Twitter, Instagram, TikTok, and podcasts. Through this task, students will have the chance

to interact thoughtfully with a variety of texts relevant to the environment, promote a cause they are passionate about, identify and discuss potential solutions, and motivate others to take action. The ideal scenario would be for students to participate in this kind of task and the related activities over the course of several class sessions. Through such a task, students interact with a range of environmental problems and are given the time and resources to effectively study them.

a. Assignment #1: Using online genres to promote sustainability.

The social media portfolio assignment complies with all five of the previously listed eco-CLA principles. The assignment draws the assumption that online environments do not allow for the formation of knowledge apart from the physical reality of learners. Online discussions about environmental issues are therefore advertisements for physical activities.

b. Assignment #2: Promoting an experiential understanding of nature.

The second instructional strategy encourages students to interact directly with nature. The current task, which compares scientific writing and nature poetry, is perhaps best suited for students with high intermediate and advanced proficiency. The intention is for students to understand that while diverse language uses may encourage more experiential qualities by presenting the physical world through actions and processes, scientific writing frequently nominalizes, commodifies, and quantifies the natural world. Additionally, it encourages students to interact with and feel nature up close, an enjoyable experience that poetry appropriately conveys.

c. Assignment #3: Challenging unsustainable narratives.

The final instructional example aims to challenge unsustainable narratives and show sustainability as a matter of logic. As humanity is frequently viewed outside of the animal kingdom and human issues are seen as distinct from those of nature, the activity aims to challenge the idea that people are fundamentally different from the rest of the natural world. The current activity attempts to help students perceive themselves and humankind in general as a part of the circle of life in order to refute this narrative. Additionally, students will modify a well-known song to meet the sustainable perspective established via this project in order to emphasize the creative possibilities of art-related genres. As a result, the exercise encourages a more sustainable view of how humans and nature interact.

Jayantini, et. al (2022)

The current study discovered two approaches connected to eco-cultural components when studying identification of local knowledge with their educational capabilities by closely observing during the field investigation. Possible sources of teaching materials include a variety of lexicons and expressions that include local knowledge and relevant values that are part of local community life in the natural environment.

Two activities are used to identify local wisdom as part of the identification.

a. Identifying ecological values - The history of the village's name, the agricultural system, and the Demulih hill with its biological resources like the flora and fauna such as plants for rituals and bird species to protect are the ecological values that are potentially explored by English department students through an examination of fundamental topics and basic knowledge of discourse analysis.

b. Identifying cultural values - Regular traditions and the Rejang Wastra dance are examples of cultural values that can be employed in teaching and learning.

both intended as the contextual teaching materials.

Meighan, P. J. (2023)

To put (un)learning into practice, the author suggests a Heritage language pedagogy (HLP) as a

component of trans epistemic language instruction. Trans Epistemic language education, which he proposes and specifies, is a method of learning, teaching, knowing, and being that promotes fair and non-hierarchical knowledge co-creation when we interact with different languages, peoples, cultures, and geographies. Trans Epistemic language education is the process of learning from many knowledge and lifeways in order to give teachers, students, and humanity large additional theoretical instruments for socially and environmentally sustainable futures. In an Earth-cantered learning process, the author defines HLP as a way for all multicultural and multilingual learners—those who are fluent in majority, Indigenous, and minority languages—to feel empowered and valued.

The author gave his students a newspaper story titled "Extinction of Indigenous Languages Leads to Loss of Exclusive Knowledge about Medicinal Plants" that was linked to an academic article. Over the course of a six-lesson mini-unit he created, he and his students examined the online text's rhetorical, visual, grammatical, lexical, and cultural facets and created an engaging World viewer blog.

They acquired multiliteracy abilities in the World viewer, such as visual, digital, and print literacies. In addition, by questioning hegemonic Eurocentric mindsets and notions like cognitive and linguistic imperialism and human distinctiveness, the World viewer activates trans epistemic language instruction through an epistemic (un)learning, delinking, and relinking cycle. The World viewer gave students the opportunity to discuss their worldviews with one another and co-create knowledge while speaking English while using the lenses of their different heritage, Indigenous or non-dominant languages, and worldviews.

As Table 2. suggests, five research studies (Yahya, L., & Prakash, A., 2020; Yadnya, I. B. P., Simpen, I. W., & Satyawati, M. S., 2021; Micalay-Hurtado, M. A., & Poole, R., 2022; Jayantini, et. al, 2022; Meighan, P. J, 2023) were detected. They described several implementations of eco-literacy in ELT to help students facing Smart Society. Thus, the results show that all the implementations as presented in Table 4.2 can improve learners' ability to prepare for Smart Society. The results of the study also show how attitudes and awareness towards students, Eco-literacy is that it can open creativity and frame creative writing, also in the lexicon Eco-literacy can take advantage of the accessibility of technology such as social media and business to encourage students to think critically about environmental issues and language use. With the use of language heritage pedagogy where learners share perspectives and create knowledge together while speaking English through the language and seeing alternative, endangered, heritage, minority, or Indigenous worlds.

English teachers play a crucial role in equipping students with essential life skills necessary for success in their careers and as responsible members of society. As future leaders and organizers in a progressively sustainable world, students require education tailored to their local contexts and needs. In situations where the introduction of new materials is impractical or curriculum overload is a concern, supporting teachers and facilitating activities that encourage sustainability through observation, reflection, adaptation, and creative response to existing resources may be more effective.

Table 3. opportunities are proposed by eco-literacy in ELT in detected studies

Yahya, L., & Prakash, A. (2020)

Learner autonomy, a shift in attitude toward language learning, risk-taking, constructors of knowledge, technology exploration, and creative aesthetic value were all significantly influenced by nature journaling. Above all, indigenous nature journaling has the potential to inspire and

frame creative writing. It captured the participants' invaluable creative process learning experiences, preparing them to be a promising 21st century teacher.

The participants will contribute to the practice community, the community, and the global technologically driven world. The authors believe that elements of new pedagogies for deep learning and 21st Century Skills can be interwoven with nature to produce more transformative eco-literacy research.

Yadnya, I. B. P., Simpen, I. W., & Satyawati, M. S. (2021)

Using the Eco literacy lexicon formulation in descriptive reading texts determines and develops material in teaching reading skills, especially for bilingual high school students who speak English and another language. This study's English reading texts cover a wide range of topics in order to broaden students' knowledge of reading texts related to their Eco literacy.

Micalay-Hurtado, M. A., & Poole, R. (2022)

The goal of research is to contribute to a more sustainable world in which people can prosper. By operationalizing language teachers' backgrounds, they hope to bring our pool of skills and knowledge to problems that require everyone's contribution. Furthermore, students' perceptions and interactions with nature are influenced by the use of technology in the classroom. They recognize that technology must be used with caution and thought, and we keep this in mind by promoting technology and the online world.

Jayantini, et. al (2022)

This journal identifies cultural values that can be discussed when English majors are asked to analyze texts containing local terms or values. Through in-depth observations made during field studies, this study discovered two approaches related to ecocultural aspects in exploring the identification of local wisdom with its educational aspects.

Various lexicons and expressions found in local community life that contain local wisdom and meaningful values are potential sources of teaching materials. Identifying local wisdom in this case entails two activities: identifying ecological and cultural values, both of which are intended as contextual teaching materials.

Meighan, P. J. (2023)

Heritage language pedagogy demonstrates how learners shared perspectives and co-created knowledge while language in English through the lens of (their) alternative, endangered, heritage, minoritized, or Indigenous languages and worldviews. The increased exchange of worldviews and knowledges created more opportunities for a trans epistemic, decolonial, and pluriverse dialogue on current and future sustainability issues, such as the climate and humanitarian crises, based on existing learner knowledges that might have been overlooked, diminished, or excluded in mainstream Western ELT classrooms.

The second inquiry examined the opportunities presented by eco-literacy in English Language Teaching (ELT) for students to navigate the Smart Society. Nature journaling emerged as a significant influencer, fostering learner autonomy, a positive shift in language learning attitudes, willingness to take risks, active engagement in knowledge construction, exploration of technology, and appreciation for creative aesthetics. Particularly, Indigenous nature journaling (In4d) holds promise in igniting creativity and shaping creative writing skills. It captured participants' invaluable learning experiences in the creative process, equipping them with essential tools for the 21st century and positioning them as promising educators in a technologically driven global

society, thereby adding value to their practice community and the broader world (Yahya, L., & Prakash, A. ,2020). Using the Eco literacy lexicon formulation in descriptive reading texts determines and develops material in teaching reading skills, particularly for high school students who are bilingual in English and another language. The English reading texts can expand students' knowledge of reading texts related to their Eco literacy (Yadnya, I. B. P., Simpen, I. W., & Satyawati, M. S., 2021).

Micalay-Hurtado, M. A., & Poole, R. (2022) research goal is to make a positive contribution to a more sustainable world where people can prosper. They hope to bring students skills and knowledge to problems that require everyone's contribution by operationalizing the backgrounds of language teachers. Furthermore, the use of technology in the classroom influences students' perceptions and interactions with nature. Students are able to understand that technology must be used with caution and thought, and we are mindful of this by promoting technology and the online world. Another opportunity is using various lexicons and expressions containing local wisdom and meaningful values found in local community life that are potential sources of teaching materials. In this case, identifying local wisdom entails two activities: identifying ecological values and identifying cultural values, both of which are intended as contextual teaching materials (Jayantini, et. al, 2022). (Meighan, P. J. 2023) Heritage language pedagogy promotes co-creation of knowledge through alternative, endangered, or Indigenous languages, fostering trans epistemic, decolonial, and pluriversal dialogue on sustainability issues. Through these opportunities, students in English Language Teaching (ELT) are also enhancing their abilities in various aspects. They are learning to summarize texts and assess how visual and multimedia elements contribute to the text's meaning. Furthermore, they are exploring how these elements can reinforce the key concepts identified within the text (reading). Additionally, they are honing their storytelling skills, whether recounting real-life experiences or crafting imaginary tales. In their writing endeavors, they are organizing descriptive information coherently and presenting events in a sequential manner, while also ensuring the appropriate use of past tenses (writing). Moreover, they are delving into the concept of sustainability and understanding its significance in maintaining and safeguarding systems (science). Furthermore, they are leveraging technology to enhance their writing abilities collaboratively. This includes tasks such as collectively designing, reviewing, and editing documents using appropriate digital tools. Additionally, they are utilizing technology to address initial inquiries effectively (technology).

Conclusion

This study set out to investigate the implementations of eco-literacy in ELT to face the Smart Society and explore the opportunities proposed by eco-literacy in ELT to face Smart Society. This study has identified an unique opportunity that ELT offers to integrate Eco-literacy into curricula, materials, assessments, and teacher training and professional development programs, rather than addressing it privately or as an afterthought. Educators can help normalize a routine focus on Eco-literacy, expand and improve opportunities for the development of necessary knowledge, skills, and attitudes, and deepen learners' connection with English as a tool for sustainability in this way. Overall, this study strengthens the idea that eco-literacy and its advantages for dealing with a smart society characterized by technological and ICT evolution, globalization and the need for innovation, consequently highlighting the need for students to develop relevant skills and competencies. The findings will be of interest to educators who are passionate about Eco literacy and curriculum developers who are

interested in including Eco literacy as teaching materials. The study is limited by the lack of information on implementation of Eco literacy in specific English language skills, such as reading, writing, speaking, and listening. *Further research could usefully explore how Eco literacy is applied in learning English such as reading, speaking, writing, and listening.

Acknowledgment

References

Alexander, Richard J. 2009. Framing discourse on the environment: A critical discourse approach. New York: Routledge.

Alexander, Richard J. 2013. Shaping and misrepresenting public perceptions of ecological catastrophes: The BP gulf oil spill. Critical Approaches to Discourse Analysis Across Disciplines 7(1). 1–18.

Brown, Mark. 2008. Managing nature-business as usual: Patterns of wording and patterns of meaning in corporate environmental discourse. Oslo: University of Oslo dissertation.

Capra, F. 1997. The web of life: a new scientific understanding of living systems. Anchor Books, New York, New York, USA.

Center for Ecoliteracy. 2013. What we do. Center for Ecoliteracy, Berkeley, California, USA. http://www.ecoliteracy.org/about-us/what-we-do

Crystal, D. (2003). English as a global language. Cambridge university press.

Damico, James S., Mark Baildon & Alexandra Panos. 2020. Climate justice literacy: Stories-we-live-by, ecolinguistics, and classroom practice. Journal of Adolescent & Adult Literacy 63(6).683–691.

Frayne, Craig. 2019. An historical analysis of species references in American English. Corpora 14(3). 327–349.

Fusari, Sabrina. 2018. Changing representations of animals in Canadian English (1920s–2010s). Language & Ecology. http://ecolinguistics-association.org/journal/4563035324 (accessed 20 June 2022).

Goatly, Andrew. 2002. The representation of nature on the BBC World Service. Text 22(1). 1–27.

Goulah, Jason. 2017. Climate change and TESOL: Language, literacies, and the creation of eco-ethical consciousness. TESOL Quarterly 51(1). 90–114.

Goulah, Jason. 2018. Religion, "the religious," and language education into the Anthropocene: A response to Huamei Han's "studying religion and language

teaching and learning: Building a subfield". The Modern Language Journal 102(2). 451–455.

Goulah, Jason. 2020. TESOL into the Anthropocene: Climate migration as curriculum and pedagogy in ESL. In Jason Goulah & John Katunich (eds.), TESOL and sustainability: English language teaching in the Anthropocene era, 85–110. London: Bloomsbury Academic.

Jayantini, I. G. A. S. R., Hikmaharyanti, P. D. A., Permana, I. P. A., Raka, G. A. M. S., & Pithaloka, N. K. C. (2022). Eco-cultural Approach through Local Wisdom Identification in Designing Teaching Materials for English Department Students. In International Conference on Language, Culture and Communication (pp. 35-41).

Lischinsky, Alon. 2011. The discursive construction of a responsible corporate self. In Annika E. Sjölander & Jenny G. Payne (eds.), Tracking discourses: Politics, identity and social change, 257–286. Lund: Nordic Academic.

Lischinsky, Alon & Annika E. Sjölander. 2014. Talking green in the public sphere: Press releases, corporate voices and the environment. Nordicom Review 35(s1). 125–140.

Meighan, P. J. (2023). Transepistemic English language teaching for sustainable futures. ELT Journal

McBride, B. B., Brewer, C. A., Berkowitz, A. R., & Borrie, W. T. (2013). Environmental literacy, ecological literacy, ecoliteracy: What do we mean and how did we get here?. Ecosphere, 4(5), 1-20.

Micalay-Hurtado, M. A., & Poole, R. (2022). Eco-critical language awareness for English language teaching (ELT): Promoting justice, wellbeing, and sustainability in the classroom. Journal of World Languages, 8(2), 371-390.

Nakanishi, H., & Kitano, H. (2018). Society 5.0 Co-Creating The Future. Policy Proposals Industrial Technology, Keidanren (Japan Business Federation).

Nugraha, R. G., Jalal, F., & Boeriswati, E. (2022). The Urgency Of The Ecoliteracy Module In Improving The Ecoliteracy Ability Of Elementary School Students. In International Conference on Language and Language Teaching (pp. 43-56).

Orr, D. W. 1992. Ecological literacy: education and transition to a postmodern world. SUNY Press, Albany, New York, USA.

Pennycook, Alastair. 2018. Posthumanist applied linguistics. London: Routledge.

Sealey, Alison. 2018. Animals, animacy and anthropocentrism. International Journal of Language and Culture 5(2). 224–247.

Sealey, Alison & Lee Oakley. 2013. Anthropomorphic grammar? Some linguistic patterns in the wildlife documentary series life. Text & Talk 33(3). 399–420.

Stibbe, Arran. 2021. Ecolinguistics: Language, ecology and the stories we live by, 2nd edn.
London: Routledge.

Yadnya, I. B. P., Simpen, I. W., & Satyawati, M. S. (2021). English Reading Texts Model Using the Ecoliteracy Lexicons Approach. International Journal of Linguistics, Literature and Translation, 4(4), 145-154.

Yahya, L., & Prakash, A. (2020). Unlocking Creative Writing Through In4D-Indigenous CIY Nature Journaling: The Indigenous Voice. Journal of English as a Foreign Language Education (JEFLE), 1(1), 12-24.