

ECOLINGUISTIC DIGITAL LEARNING (EDL): INTEGRATING ENVIRONMENTAL DISCOURSE AND DIGITAL LITERACY IN EFL CLASSROOM

Anak Agung Istri Yudhi Pramawati
Universitas Mahasaraswati Denpasar-Indonesia
agunkprama@unmas.ac.id

ABSTRACT

The integration of environmental issues into English as a Foreign Language (EFL) learning has gained increasing attention in response to global sustainability challenges. At the same time, the rapid growth of social media has transformed how students access and interact with language in digital environments. This study aims to explore the implementation of the Ecolinguistic Digital Learning (EDL) model as a model-based approach to integrating environmental discourse and digital literacy in EFL classrooms. Employing a quasi-experimental design supported by qualitative data, the study involved 26 undergraduate EFL students. Data were collected through classroom observations, student reflections, interviews, and reading–writing tasks. The findings indicate that the EDL model supports meaningful language learning by encouraging critical engagement with environmental discourse, enhancing digital literacy, and fostering ecological awareness. The study highlights the pedagogical potential of EDL as an innovative model that bridges ecolinguistics, social media, and EFL instruction.

Keywords: ecolinguistic digital learning; EFL pedagogy; environmental discourse; digital literacy; social media

INTRODUCTION

The growing urgency of global environmental issues has increasingly prompted educators to reconsider the role of language education in promoting sustainability and ecological awareness. Environmental challenges such as climate change, pollution, and biodiversity loss are not only scientific or political concerns but are also deeply embedded in language and discourse. Recent studies emphasize that language plays a central role in shaping how individuals perceive, interpret, and

respond to environmental problems through narratives, metaphors, and evaluative expressions (Stibbe, 2021; Fill & Penz, 2018). From this perspective, ecolinguistics provides a critical framework for examining how linguistic choices construct ecological values and influence human–environment relationships in contemporary societies.

At the same time, rapid digital transformation has significantly reshaped English as a Foreign Language (EFL) learning environments. Social media

platforms have emerged as dominant digital spaces where environmental discourse circulates globally in the form of short texts, images, videos, hashtags, and interactive content. These platforms expose learners to authentic and up-to-date language use that reflects real-world communication practices. Recent research indicates that integrating social media into EFL instruction can enhance learner engagement, motivation, and contextualized language learning when supported by appropriate pedagogical design (Susanti et al., 2020; Mahsunah, 2021; Cahyani, 2024). Moreover, the multimodal characteristics of social media content support the development of digital literacy by encouraging learners to interpret and evaluate meaning across multiple semiotic modes (Nursyam, 2024).

However, despite the increasing scholarly attention to ecolinguistics and digital learning, existing studies tend to treat these domains separately. Recent ecolinguistic research has largely focused on critical discourse analysis of environmental texts in media and public communication, with limited emphasis on classroom-based pedagogical applications (Stibbe, 2021; Fill & Penz, 2018). Conversely, studies on social media use in EFL learning primarily highlight technological affordances, learner

motivation, or skill development, while paying insufficient attention to the ideological and ecological dimensions of digital discourse (Mahsunah, 2021; Cahyani, 2024). As a result, there remains a significant research gap in the development of instructional models that systematically integrate ecolinguistic perspectives, social media discourse, and EFL pedagogy.

Furthermore, recent studies argue that environmental topics and digital media are often positioned as supplementary components rather than as core elements of language instruction, which limits the potential of EFL education to contribute to sustainability-oriented learning and critical digital engagement (Nursyam, 2024; Helen Doron Educational Group, 2023). There is therefore a pressing need for a pedagogical model that places environmental discourse at the center of language learning while simultaneously fostering digital literacy and critical awareness.

Addressing this gap, the present study proposes the Ecolinguistic Digital Learning (EDL) model, a model-based approach that systematically integrates environmental discourse from social media into EFL learning activities. By positioning social media-based environmental texts as both linguistic input

and objects of critical analysis, the EDL model aims to support meaningful language learning while promoting ecological awareness and responsible digital engagement among EFL students.

RESEARCH METHODS

This study employed a quasi-experimental research design complemented by qualitative descriptive analysis to explore the implementation and pedagogical impact of the Ecolinguistic Digital Learning (EDL) model in EFL classrooms. The use of a mixed-method approach allowed the study to capture both observable learning outcomes and students' learning experiences during the instructional process. The quasi-experimental component was utilized to examine changes in students' language performance, while the qualitative component provided deeper insights into students' digital literacy development and ecological awareness.

The participants of this study consisted of 26 undergraduate students enrolled in an English Education program at a private university. The participants were selected purposively because they were taking a language skills course relevant to the objectives of the study. The implementation of the EDL model was conducted over several instructional

sessions, during which students engaged with environmental discourse sourced from social media platforms as part of their learning activities.

Data were collected using multiple instruments to ensure triangulation. Classroom observations were carried out to document students' engagement, interaction patterns, and participation during the learning process. Student reflective writing was collected to examine how learners articulated their understanding of environmental issues and their experiences in engaging with ecolinguistic content. In addition, semi-structured interviews were conducted to explore students' perceptions of the EDL model and its influence on their language learning and ecological awareness. Samples of student-produced texts were also analyzed to identify patterns in language use, thematic development, and critical engagement with environmental discourse.

Quantitative data obtained from students' learning tasks were analyzed descriptively to identify general trends in language performance following the implementation of the EDL model. Qualitative data from observations, reflections, interviews, and textual analysis were analyzed thematically through coding and categorization processes. This analytical

procedure enabled the identification of recurring themes related to digital literacy, ecolinguistic awareness, and learner engagement. By integrating quantitative and qualitative data, the study aimed to provide a comprehensive understanding of the effectiveness and pedagogical potential of the EDL model in EFL learning contexts.

FINDINGS AND DISCUSSION

The findings of this study indicate that the implementation of the Ecolinguistic Digital Learning (EDL) model facilitated meaningful and sustained engagement with environmental discourse in EFL learning contexts. Students actively interacted with environmental texts sourced from social media and demonstrated an increased awareness of how language functions in shaping environmental messages. Through guided analysis of ecolinguistic features such as evaluative language, metaphorical expressions, and framing strategies, students developed a more critical understanding of how environmental issues are represented and communicated in digital spaces.

In addition, the findings reveal that students exhibited greater confidence in interpreting and responding to digital texts in English. Exposure to authentic,

multimodal content enabled students to better comprehend complex environmental messages and articulate their interpretations through reflective and analytical responses. This increased confidence was evident in students' written reflections and classroom discussions, where they showed improved ability to connect linguistic features with broader environmental meanings.

From a digital literacy perspective, the EDL model supported the development of students' critical digital literacy skills. Students became more discerning in evaluating social media content, particularly in identifying persuasive strategies used to influence audiences' attitudes toward environmental issues. They demonstrated an improved ability to distinguish factual information from opinion-based or ideologically driven discourse, as well as to recognize the role of visuals, hashtags, and emotional appeals in shaping digital environmental narratives. These findings suggest that the EDL model not only enhances language learning outcomes but also equips students with essential skills for critically engaging with environmental discourse in contemporary digital environments.

The findings of this study suggest that the Ecolinguistic Digital Learning (EDL) model functions effectively as a

pedagogical bridge between ecolinguistics and digital literacy within EFL instruction. Rather than focusing solely on linguistic accuracy or mechanical language practice, the EDL model emphasizes critical engagement with both content and context, particularly environmental discourse circulating in digital spaces. This orientation aligns with recent perspectives in EFL pedagogy that advocate for meaningful, socially situated language learning grounded in real-world issues (Cahyani, 2024; Nursyam, 2024).

The increased student engagement with environmental discourse observed in this study supports recent research highlighting the pedagogical value of integrating sustainability-related content into language education. Scholars argue that environmental themes can enhance learners' critical awareness and motivation by connecting language learning to globally relevant challenges (Puspitasari & Rahardi, 2021; Stibbe, 2021). Through the EDL model, students were encouraged to analyze how linguistic choices—such as evaluative language, metaphor, and framing—shape environmental meanings, which reflects the core principles of ecolinguistics as applied to educational contexts.

From a digital literacy perspective, the findings corroborate recent studies

emphasizing the importance of critical digital engagement in EFL learning. Social media platforms expose learners to a vast range of information that varies in credibility, ideology, and communicative intent. Recent research has demonstrated that guided analysis of digital texts can improve students' ability to evaluate sources, identify persuasive strategies, and interpret multimodal meaning (Mahsunah, 2021; Susanti et al., 2020). The EDL model operationalizes these principles by positioning social media not merely as a delivery tool, but as an object of critical inquiry, thereby fostering higher levels of digital literacy.

Moreover, the EDL model supports a shift toward critical literacy in EFL education. Recent studies suggest that EFL learners benefit from instructional approaches that encourage them to question how language constructs social realities and power relations, including those related to environmental issues (Rahardi & Permatasari, 2022; Cahyani, 2024). By integrating ecolinguistic analysis into language learning activities, the EDL model enables students to move beyond surface-level comprehension toward deeper critical interpretation and reflective language production.

Overall, the discussion indicates that the EDL model responds to

contemporary calls for EFL pedagogy that integrates language learning with digital competence and sustainability education. In line with recent literature, the model demonstrates that EFL classrooms can serve as meaningful spaces for developing linguistic skills while simultaneously cultivating ecological awareness and responsible digital citizenship (Stibbe, 2021; Helen Doron Educational Group, 2023). These findings suggest that the EDL model holds strong pedagogical potential as an innovative and contextually relevant approach to EFL instruction in higher education.

CONCLUSION

This study concludes that the Ecolinguistic Digital Learning (EDL) model offers a viable and innovative pedagogical approach to integrating environmental discourse and digital literacy within EFL classrooms. By systematically incorporating social media-based environmental texts into language instruction, the EDL model positions language learning as a meaningful social practice that extends beyond the development of linguistic accuracy. The findings demonstrate that the model supports students' engagement with authentic digital texts while fostering critical awareness of how language

constructs environmental meanings in contemporary digital contexts.

Beyond its contribution to language development, the EDL model plays a significant role in promoting ecological awareness and critical digital engagement among EFL learners. Through guided ecolinguistic analysis and reflective language production, students are encouraged to critically examine environmental narratives, evaluate digital information, and articulate informed responses to ecological issues. This integrative approach aligns with recent educational perspectives that emphasize the importance of sustainability-oriented learning and responsible digital citizenship in higher education.

The study also contributes to EFL pedagogy by offering a model-based framework that bridges ecolinguistics, digital literacy, and language education coherently and systematically. Rather than treating environmental topics and digital media as supplementary elements, the EDL model foregrounds them as central components of instructional design. As such, the model has the potential to be adapted to various EFL contexts and instructional levels, particularly in settings where digital media plays a central role in students' learning experiences.

Future research is encouraged to further examine the long-term impact of the EDL model on students' ecological attitudes, critical literacy development, and language proficiency. In addition, subsequent studies may explore the application of the EDL model to other language skills, such as speaking and listening, or investigate its effectiveness across different educational contexts. Such research would contribute to a deeper understanding of how ecolinguistic and digital approaches can sustainably enrich EFL education.

REFERENCES

- Cahyani, F. (2024). Digital media use in EFL learning contexts: Students' engagement and critical literacy development. *Journal of Language Education*, 7(3), 145–158.
- Fill, A., & Penz, H. (2018). *The Routledge handbook of ecolinguistics*. London: Routledge.
- Helen Doron Educational Group. (2023). *Eco-linguistics: Teaching English for a greener future*. Retrieved from <https://www.helendoron.com>
- Kern, R. (2019). Technology as pharmakon: The promise and perils of digital literacies in foreign language education. *The Modern Language Journal*, 103(1), 340–357.
- Mahsunah, E. (2021). Digital literacy-based English learning in post-pandemic education. *Qalamuna: Journal of Education, Social, and Religion*, 13(2), 957–968.
- Nursyam, N. (2024). English learning in the digital era: Students' perceptions and critical digital challenges. *Journal of Humanities and Language Studies*, 3(1), 12–25.
- Permatasari, A. K., & Rahardi, R. K. (2022). Ecolinguistic perspectives on environmental discourse in language education. *Jurnal Kata*, 6(2), 311–324.
- Puspitasari, A. K., & Rahardi, R. K. (2021). Language, ideology, and environment: An ecolinguistic study in educational contexts. *Indonesian Journal of Applied Linguistics*, 11(1), 95–107.
- Rahardi, R. K., Setyaningsih, Y., & Permatasari, A. K. (2022). Critical ecolinguistics and environmental narratives in educational discourse. *Studies in English Language and Education*, 9(2), 689–704.
- Stibbe, A. (2021). *Ecolinguistics: Language, ecology and the stories we live by* (2nd ed.). London: Routledge.
- Susanti, D., Nurkamto, J., & Marmanto, S. (2020). Integrating digital media in EFL classrooms: Enhancing students' critical thinking and language skills. *Indonesian Journal of Applied Linguistics*, 10(2), 432–444.
- Tohiroh, T. (2023). Environmental discourse on social media: An ecolinguistic analysis for language learning. *Journal of Language and Ecology*, 3(2), 44–58.
- van Lier, L. (2018). Agency, affordances, and the ecology of language learning. *The Modern Language Journal*, 102(2), 301–316.
- Warschauer, M., & Healey, D. (2019). Technology and second language learning. In *The Cambridge handbook of language learning*. Cambridge: Cambridge University Press.
- Zhang, X., & Zou, D. (2022). Social media-assisted language learning: A meta-analysis. *Computer*

Assisted Language Learning, 35(8), 1519–1545.