

Integrating Digital Ecolinguistics through Social Media to Enhance EFL Students' Reading and Writing Skills

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ABSTRACT

The rapid development of digital technology has significantly transformed the landscape of English as a Foreign Language (EFL) learning, particularly through the widespread use of social media as a source of authentic language input. This study aims to examine the effectiveness of the Ecolinguistic Digital Learning (EDL) model in improving students' reading and writing skills by integrating environmental discourse from social media into EFL instruction. A quasi-experimental research design employing a one-group pre-test and post-test approach was used in this study. The participants consisted of 26 undergraduate EFL students. Data were collected through reading and writing tests, classroom observations, and semi-structured interviews, and were analyzed using a paired t-test and thematic analysis. The findings reveal a statistically significant improvement in students' reading and writing performance after the implementation of the EDL model ($p < 0.001$). In addition, students reported positive perceptions of the learning activities, highlighting increased motivation, engagement, and ecological awareness. These results suggest that the EDL model offers an effective and meaningful pedagogical approach for integrating digital literacy, ecolinguistics, and EFL learning in higher education contexts.

Keywords: Digital Ecolinguistics; social media; EFL learning; reading and writing skills; environmental discourse; digital literacy

Introduction

The integration of social media into EFL learning provides authentic language exposure by allowing students to engage with real-world texts that reflect contemporary language use. Through platforms such as Instagram, TikTok, and YouTube, learners encounter a wide range of multimodal texts that combine written language, visual imagery, audio elements, and interactive features. These characteristics support deeper comprehension and foster higher levels of learner engagement, particularly among digitally native students. Unlike traditional textbook materials, social media content presents language in dynamic, contextualized, and socially meaningful ways, enabling learners to observe how English is used to convey messages, persuade audiences, and construct identities in everyday communication.

At the same time, ecolinguistics emphasizes the critical role of language in shaping environmental awareness, values, and attitudes toward nature. From an ecolinguistic perspective, language does not merely describe environmental realities but actively constructs particular ways of thinking about ecological relationships and sustainability. Linguistic choices such as metaphors, evaluative expressions, and narrative framing influence how environmental issues are perceived and responded to by audiences. Therefore, incorporating ecolinguistic perspectives into language education allows learners to critically examine how environmental discourse operates and how language can either promote or undermine ecological responsibility.

This study integrates both perspectives through the Ecolinguistic Digital Learning (EDL) model, which positions social media as a pedagogical space for meaningful language learning. By engaging with environmental discourse on social media, students are encouraged to develop English reading and writing skills while simultaneously enhancing digital literacy and ecological awareness. The EDL model thus bridges EFL instruction, digital pedagogy, and ecolinguistic inquiry, offering a holistic approach to language learning that is relevant to contemporary global challenges.

Literature Review

Ecolinguistics explores the intricate relationship between language and the environment, emphasizing how linguistic choices reflect, shape, and influence human interactions with the natural world. From this perspective, language is not viewed merely as a neutral medium of communication but as a powerful social practice that can promote ecological awareness or, conversely, legitimize environmentally harmful behaviors. Scholars in ecolinguistics argue that metaphors, narratives, and evaluative expressions play a crucial role in constructing particular views of nature and sustainability. Therefore, analyzing environmental discourse allows learners to critically examine how language contributes to the formation of ecological values and ideologies.

In parallel, social media has emerged as a significant platform supporting digital literacy and authentic learning in EFL contexts. Social media environments provide learners with exposure to real-life language use through multimodal texts that integrate written language, images, videos, and sound. Such authentic materials enable students to observe how English functions in contemporary communication, including persuasive, informative, and expressive purposes. Previous studies have shown that social media-based learning can enhance motivation, engagement, and language proficiency by aligning instructional content with students' everyday digital experiences.

Integrating ecolinguistics and social media in EFL instruction creates a meaningful and contextually rich learning environment. Through this integration, learners are encouraged not only to develop linguistic competence but also to engage critically with environmental issues represented in digital discourse. By analyzing and responding to ecolinguistic content on social media, students practice reading and writing skills while simultaneously building ecological awareness and digital literacy. This integrative approach positions language learning as a socially relevant activity that connects linguistic development with global environmental challenges, thereby reinforcing the educational value of English instruction in the digital era.

Methodology

This study employed a quasi-experimental research design using a one-group pre-test and post-test model to examine the effectiveness of the Ecolinguistic Digital Learning (EDL) model in improving EFL students' reading and writing skills. This design was selected to identify changes in students' language performance after the instructional intervention without the inclusion of a control group. The pre-test was administered to measure students' initial reading and writing abilities, while the post-test was conducted after the implementation of the EDL-based learning activities to assess learning gains.

The participants of this study were 26 undergraduate students enrolled in an English as a Foreign Language (EFL) program at Universitas Mahasaraswati Denpasar. The participants were selected purposively because they were taking a language skills course relevant to the objectives of the study. This number of participants was considered sufficient for a small-scale classroom-based quasi-experimental study commonly conducted in educational research.

Data were collected through multiple instruments to ensure methodological triangulation. The primary data were obtained from reading and writing tests administered before and after the intervention. The reading component focused on students' comprehension of ecolinguistic texts derived from social media, while the writing component required students to produce short reflective or argumentative texts related to environmental issues. In addition, classroom observations were conducted to document students' engagement, interaction, and responses during the learning process. Semi-structured interviews were also carried out to explore students' perceptions of learning English through social media-based ecolinguistic content.

Quantitative data from the pre-test and post-test were analyzed using a paired t-test to determine whether the observed differences in students' scores were statistically significant. Qualitative data from observations and interviews were analyzed thematically to identify recurring patterns related to students' learning experiences, motivation, and

ecological awareness. By combining quantitative and qualitative approaches, this study aimed to provide a comprehensive understanding of the effectiveness of the EDL model

Results and Discussion

The results of this study indicated a significant improvement in students' reading and writing skills after the implementation of the Ecolinguistic Digital Learning (EDL) model. Quantitative analysis of the pre-test and post-test scores revealed a clear increase in students' overall performance. The paired t-test analysis demonstrated that the difference between students' scores before and after the intervention was statistically significant ($p < 0.001$), indicating that the EDL model had a positive effect on students' English literacy development. This finding suggests that exposure to ecolinguistic content through social media provides meaningful linguistic input that supports reading comprehension and written expression.

In terms of reading skills, students showed improved ability to comprehend environmental texts sourced from social media. They became more familiar with key vocabulary related to environmental issues and were better able to identify main ideas, supporting details, and persuasive elements within the texts. The multimodal nature of social media content, which combines written language with visual and audio elements, appeared to facilitate comprehension by providing contextual cues that supported meaning-making. This result aligns with previous studies emphasizing the role of authentic and multimodal materials in enhancing EFL reading skills.

Regarding writing skills, students demonstrated noticeable progress in producing reflective and argumentative texts. After the implementation of the EDL model, students were able to express ideas more clearly, use relevant vocabulary more accurately, and construct more coherent arguments related to environmental topics. Their writing reflected not only improved linguistic competence but also greater critical awareness of how language can be used to influence readers' attitudes toward environmental issues. This finding supports the view that meaningful content and critical engagement can enhance students' writing development in EFL contexts.

Qualitative findings from classroom observations and interviews further supported the quantitative results. Students reported increased motivation to participate in learning activities that involved social media-based environmental content. Many students expressed that learning through familiar digital platforms made the lessons more engaging and less monotonous compared to traditional textbook-based instruction. In addition, students reported heightened ecological awareness, as they became more conscious of environmental problems and reflected on their own attitudes and behaviors after analyzing ecolinguistic discourse.

The integration of ecolinguistics and social media in the EDL model also encouraged active learning and discussion. Students were not only passive recipients of information but were actively involved in analyzing, interpreting, and responding to environmental messages. This participatory learning environment contributed to deeper engagement and supported the development of critical literacy skills. Overall, the results suggest that the EDL model effectively integrates language learning with digital literacy and ecological awareness, making it a valuable pedagogical approach for contemporary EFL instruction.

Conclusion

This study concludes that the Ecolinguistic Digital Learning (EDL) model is effective in enhancing EFL students' literacy skills, particularly in reading and writing, while simultaneously fostering ecological awareness. The integration of social media-based environmental discourse into English language learning provides students with authentic, meaningful, and context-rich materials that support language development. The significant improvement in students' reading and writing performance demonstrates that the EDL model successfully facilitates linguistic growth through engagement with real-world digital texts.

Beyond linguistic outcomes, the EDL model contributes to the development of students' digital literacy and critical awareness. By analyzing ecolinguistic discourse on social media, students are encouraged to reflect on how language shapes perceptions of environmental issues and influences attitudes toward sustainability. This process

positions language learning not merely as the acquisition of grammatical competence, but as a socially and ethically meaningful practice connected to global challenges.

Furthermore, the positive perceptions reported by students indicate that the EDL model aligns well with contemporary learning preferences and digital habits. Learning activities that incorporate familiar social media platforms increase motivation, engagement, and active participation, creating a learning environment that is both effective and relevant. As such, the EDL model offers an innovative pedagogical approach that bridges EFL instruction, digital pedagogy, and environmental education.

In conclusion, this study suggests that integrating ecolinguistics and social media in EFL learning can contribute to sustainable language education in higher education contexts. The EDL model has the potential to be adapted and implemented in various educational settings to support the development of linguistically competent, digitally literate, and ecologically aware learners. Future research may further explore the long-term impact of this model and its application to other language skills or learner populations.

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