

Pengertian: Jurnal Pendidikan Indonesia (PJPI)

E-ISSN: 2986-9528 | P-ISSN: 2986-9439

Website <https://ejournal.lapad.id/index.php/pjpi>

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Vol. 4, No. 2, 2026, 769-786
DOI: <https://doi.org/10.61930/pjpi.v4i2>

Integrating Eco-ELT in ESP to Foster Green Communication Competence: Evidence from Indonesian Polytechnic

Dian Heriani^{1*)}, Evi Agustina Sari²⁾, Trisna Hidayati³⁾

^{1,2,3)} Politeknik Negeri Sriwijaya, Palembang, Indonesia

*Corresponding Author: dianheriani@polsri.ac.id

Abstract:

Vocational higher education is increasingly expected to prepare graduates who possess not only profession-oriented English proficiency but also the ability to communicate responsibly about sustainability issues. Despite growing interest in Ecological English Language Teaching (Eco-ELT), its integration into English for Specific Purposes (ESP) within polytechnic education remains underexplored. This study investigates how Eco-ELT can be integrated into ESP to foster Green Communication Competence, drawing evidence from polytechnic institutions in Indonesia and China. Employing a mixed-methods design, data were collected through questionnaires and semi-structured interviews involving ESP lecturers from both institutions. Quantitative data were analyzed descriptively, while qualitative data were examined using thematic analysis to identify pedagogical practices, institutional support, implementation challenges, and strategies for integrating sustainability into ESP instruction. The findings reveal that lecturers across both institutions demonstrate positive attitudes toward embedding sustainability into ESP learning. However, successful implementation depends on teacher readiness, institutional commitment, curriculum support, the availability of sustainability-oriented teaching materials, and collaboration with industry partners. Evidence from the two polytechnic contexts suggests that Eco-ELT strengthens Green Communication Competence by connecting language learning with authentic environmental and professional communication tasks. The study concludes that Eco-ELT provides a practical pedagogical framework for transforming ESP instruction in vocational higher education and contributes to preparing environmentally responsible graduates capable of participating in sustainable professional practices.

Keywords: *Eco-ELT, English for Specific Purposes, Green Communication Competence, TVET, Sustainability, Polytechnic.*

Abstrak:

Pendidikan tinggi vokasi dituntut menghasilkan lulusan yang tidak hanya memiliki kompetensi bahasa untuk kebutuhan profesional, tetapi juga mampu merespons tantangan pembangunan berkelanjutan melalui komunikasi yang bertanggung jawab terhadap lingkungan. Meskipun konsep Ecological English Language Teaching (Eco-ELT) mulai mendapat perhatian dalam kajian pendidikan bahasa, implementasinya pada pembelajaran

English for Specific Purposes (ESP), khususnya di lingkungan politeknik, masih relatif terbatas. Penelitian ini bertujuan mengeksplorasi bagaimana integrasi Eco-ELT dalam pembelajaran ESP berkontribusi terhadap pengembangan Green Communication Competence berdasarkan bukti empiris dari institusi politeknik di Indonesia dan Tiongkok. Penelitian menggunakan pendekatan mixed methods dengan melibatkan dosen ESP dari kedua institusi melalui kuesioner dan wawancara semi-terstruktur. Analisis dilakukan secara deskriptif kuantitatif dan tematik kualitatif untuk mengidentifikasi praktik pembelajaran, dukungan institusional, tantangan implementasi, serta strategi pengembangan Eco-ELT. Hasil penelitian menunjukkan bahwa dosen pada kedua institusi memiliki persepsi positif terhadap integrasi keberlanjutan dalam pembelajaran ESP. Namun, implementasinya dipengaruhi oleh kesiapan dosen, dukungan kebijakan institusi, ketersediaan materi ajar, serta kolaborasi dengan dunia industri. Bukti dari kedua politeknik menunjukkan bahwa Eco-ELT mampu memperkuat Green Communication Competence melalui pembelajaran kontekstual yang menghubungkan kompetensi bahasa Inggris dengan isu keberlanjutan dan kebutuhan profesional. Penelitian ini menegaskan bahwa Eco-ELT merupakan pendekatan pedagogis yang relevan untuk memperkuat transformasi pembelajaran ESP di pendidikan vokasi menuju pencapaian tujuan pembangunan berkelanjutan.

Kata Kunci: *Eco-ELT, Bahasa Inggris untuk Tujuan Tertentu, Kompetensi Komunikasi Hijau, TVET, Keberlanjutan, Politeknik.*

INTRODUCTION

The transition toward sustainable development has fundamentally reshaped the mission of higher education institutions worldwide, particularly those offering Technical and Vocational Education and Training (TVET). Universities and polytechnics are increasingly expected to produce graduates who possess not only technical expertise and professional competence but also the knowledge, attitudes, and communication skills required to address environmental and sustainability challenges. This expectation is closely aligned with the United Nations Sustainable Development Goals (SDGs), especially Goal 4 (Quality Education), Goal 8 (Decent Work and Economic Growth), and Goal 13 (Climate Action), which emphasize the integration of sustainability into educational practices. Within this context, language education has also undergone significant transformation. English is no longer viewed solely as a tool for international communication; rather, it has become an important medium through which future professionals exchange ideas, negotiate sustainable solutions, and participate in global environmental discourse. Consequently, English language education, particularly English for Specific Purposes (ESP), is increasingly expected to contribute to the development of graduates who are capable of communicating responsibly within sustainability-oriented professional environments (UNESCO, 2017; Fuchs, 2024; Jayaprakash, 2024; Moso et al., 2025).

In Indonesian polytechnics, ESP plays a strategic role in preparing students for workplace communication across various vocational sectors, including hospitality, engineering, business, maritime studies, and information technology. Nevertheless, current ESP practices remain predominantly oriented toward linguistic competence, occupational terminology, and workplace communication, while environmental literacy and sustainability communication receive relatively limited attention. Meanwhile, industries are undergoing a rapid transition toward green production systems, environmentally responsible business practices, and sustainable services, creating new expectations for graduates who can communicate environmental issues professionally in English. Employers increasingly seek graduates capable of preparing sustainability reports, discussing green technologies, promoting environmentally responsible services, and participating in international sustainability initiatives. This mismatch between existing ESP instruction and emerging workplace demands highlights the urgent need to redesign language education by integrating ecological perspectives into vocational English learning. Eco-ELT offers a promising pedagogical approach to address this need by embedding sustainability concepts into authentic language-learning activities while simultaneously strengthening professional communication competence (Albertz & Pilz, 2025; Ibrahim et al., 2024; Alhomidan, 2025; Suhaili & Mohama, 2021).

Recent studies have demonstrated growing interest in integrating sustainability into language education through Environmental Education, Education for Sustainable Development (ESD), Eco-pedagogy, and Eco-ELT. Previous research has primarily examined environmental literacy (Kazazoglu, 2025), eco-pedagogical practices in English learning (Maghfiroh et al., 2025), teacher perceptions of sustainability integration (Saiful, 2023), green skills development in TVET (Ibrahim et al., 2024), and sustainability-oriented vocational education (Albertz & Pilz, 2025; Fuchs, 2024). Although these studies have substantially enriched theoretical discussions, three important gaps remain. First, limited empirical studies investigate how Eco-ELT can be systematically integrated into ESP curricula within Indonesian polytechnic contexts. Second, most previous studies emphasize environmental awareness or green literacy, whereas the concept of Green Communication Competence—the ability to communicate environmental knowledge effectively, critically, ethically, and professionally in workplace contexts—has received little scholarly attention. Third, existing research rarely proposes a pedagogical framework

that simultaneously connects Eco-ELT, ESP, vocational communication, and sustainability competencies. These gaps indicate that the integration of ecological language pedagogy into vocational English education remains insufficiently explored and requires further empirical investigation (Saiful, 2023; Kazazoglu, 2025; Yu et al., 2024; Albertz & Pilz, 2025).

Responding to these research gaps, the present study investigates how Eco-ELT can be integrated into English for Specific Purposes (ESP) instruction to foster Green Communication Competence among students in Indonesian polytechnics. Specifically, the study aims to examine lecturers' perceptions of Eco-ELT integration, identify institutional and pedagogical factors influencing its implementation, explore challenges encountered during the integration process, and formulate a practical pedagogical framework that supports sustainability-oriented ESP instruction. Accordingly, this study addresses the following research questions: (1) How is Eco-ELT currently integrated into ESP learning within Indonesian polytechnic education? (2) What institutional, pedagogical, and instructional factors influence the implementation of Eco-ELT? (3) What challenges do ESP lecturers encounter when integrating sustainability into English instruction? (4) How does Eco-ELT contribute to fostering Green Communication Competence within vocational education?

The novelty of this study lies in its effort to reposition Eco-ELT from a general environmental education approach into a vocationally oriented ESP pedagogical framework that explicitly develops Green Communication Competence. Unlike previous studies that predominantly focus on environmental awareness, eco-literacy, or sustainability values, this research conceptualizes sustainability communication as an integral component of professional communicative competence required in vocational education. Furthermore, the study proposes an integrative framework linking Eco-ELT principles, contextualized ESP instruction, workplace communication, and sustainability competencies within Indonesian polytechnic education. This integrated perspective extends current Eco-ELT scholarship by demonstrating that language learning can simultaneously develop professional communication skills and ecological responsibility, thereby offering both theoretical refinement and practical innovation for sustainability-oriented language education.

This study is expected to contribute theoretically, pedagogically, and practically to the advancement of English language education in vocational higher education.

Theoretically, it enriches the emerging body of knowledge on Eco-ELT by introducing Green Communication Competence as a complementary construct within ESP pedagogy. Pedagogically, the findings provide evidence-based guidance for lecturers in designing sustainability-oriented English learning activities that align with vocational contexts and industry expectations. Practically, the proposed framework may assist curriculum developers, institutional leaders, and policymakers in integrating sustainability principles into ESP curricula across Indonesian polytechnics. Beyond its immediate educational implications, this study is expected to serve as a valuable reference for future research investigating the intersection of language education, vocational training, and sustainable development, while supporting broader national and global efforts to prepare graduates capable of contributing to environmentally responsible professional practices.

METHODOLOGY

This study employed a mixed-methods research design, integrating quantitative and qualitative approaches to provide a comprehensive understanding of how Ecological English Language Teaching (Eco-ELT) can be integrated into English for Specific Purposes (ESP) instruction to foster Green Communication Competence in Indonesian polytechnic education. The mixed-methods approach was selected because the integration of sustainability into language education involves multidimensional aspects, including lecturers' pedagogical perceptions, institutional support, instructional practices, and implementation challenges, which cannot be adequately explained using a single research approach. Quantitative data were used to identify general patterns of lecturers' perceptions and implementation practices, while qualitative data provided deeper insights into lecturers' experiences, instructional strategies, and contextual factors influencing Eco-ELT implementation. The integration of both datasets enabled a more comprehensive interpretation of sustainability-oriented language pedagogy and enhanced the credibility of the research findings through methodological triangulation (Creswell & Plano Clark, 2018).

The study was conducted at Indonesian polytechnic institutions offering English for Specific Purposes (ESP) courses across various vocational disciplines, including hospitality, engineering, business administration, accounting, information technology, and maritime studies. Participants consisted of ESP lecturers who had experience teaching

vocational English in higher education. A total of 15 ESP lecturers participated in the questionnaire survey. To obtain richer qualitative information, six lecturers were purposively selected for semi-structured interviews based on their teaching experience, disciplinary backgrounds, and involvement in curriculum development. Purposive sampling was employed because the study required participants possessing adequate knowledge of ESP pedagogy and vocational curriculum implementation.

The participants represented diverse academic backgrounds and teaching experiences ranging from early-career lecturers to senior educators with more than ten years of professional teaching experience. This diversity enabled the study to capture a broad range of perspectives regarding the opportunities and challenges of integrating Eco-ELT into ESP instruction. Two research instruments were employed. The first instrument was a structured questionnaire consisting of four sections: demographic information, lecturers' perceptions of Eco-ELT, institutional readiness, and implementation challenges. All questionnaire items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire was developed based on previous studies concerning Eco-ELT, Education for Sustainable Development (ESD), ESP pedagogy, and sustainability literacy. Before administration, the instrument underwent expert validation involving specialists in English language education and vocational education. A pilot study was subsequently conducted to evaluate item clarity and internal consistency.

The second instrument was a semi-structured interview protocol designed to explore lecturers' experiences in integrating sustainability into ESP classrooms. Interview questions focused on instructional practices, curriculum adaptation, teaching materials, institutional support, perceived barriers, and future expectations for Eco-ELT implementation. Each interview lasted approximately 30–45 minutes and was audio-recorded with participants' consent before being transcribed verbatim for qualitative analysis. Data collection was conducted over a three-month period. The research commenced with obtaining institutional permission and ethical approval from participating polytechnics. Subsequently, the online questionnaire was distributed to ESP lecturers using Google Forms. Participation was voluntary, and respondents provided informed consent before completing the questionnaire. Following the survey, six lecturers were invited to participate in semi-structured interviews. The interviews were conducted

online via Zoom or Google Meet, depending on participants' availability. Throughout the data collection process, confidentiality and anonymity were maintained by assigning identification codes to each participant instead of using personal names.

Quantitative data obtained from the questionnaire were analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations, to describe lecturers' perceptions of Eco-ELT integration, institutional readiness, and implementation challenges. The statistical analysis was conducted using IBM SPSS Statistics version 26. Qualitative interview data were analyzed using thematic analysis following the six-step procedure proposed by Braun and Clarke (2006), including familiarization with the data, initial coding, theme generation, theme review, theme definition, and report writing. To improve the trustworthiness of qualitative findings, member checking and peer debriefing were employed during data interpretation.

Finally, quantitative and qualitative findings were integrated during the interpretation stage to develop a comprehensive understanding of Eco-ELT implementation and its contribution to Green Communication Competence in Indonesian polytechnic education. Several strategies were implemented to ensure the rigor of the study. Instrument validity was established through expert judgment, while questionnaire reliability was evaluated using Cronbach's Alpha coefficient. Qualitative credibility was strengthened through member checking, peer review, and methodological triangulation between survey and interview findings.

Ethical principles were observed throughout the research process. Participation was entirely voluntary, and respondents were informed about the objectives of the study before providing written consent. Participants were assured that all information would remain confidential, used solely for academic purposes, and reported anonymously to protect their identities.

RESULT AND DISCUSSION

ESP Lecturers Demonstrate Positive Readiness toward Eco-ELT Integration

The first findings show that most ESP lecturers at Indonesian polytechnics view the integration of sustainability principles into English language learning as an increasingly relevant need in vocational education. Respondents considered that ESP learning was no longer sufficiently oriented towards mastering professional terminology and

communication skills in the workplace, but also had to be able to prepare students for the demands of an industry that increasingly prioritized sustainable practices. In various vocational study programs, such as hospitality, engineering, business administration, and information technology, issues regarding energy efficiency, waste management, circular economy, and environmental responsibility are starting to become part of daily professional activities. Therefore, lecturers view that English learning materials need to be contextualized with these issues so that students are able to use English in professional situations related to sustainability.

Table 1. ESP Lecturers' Perceptions of Eco-ELT Integration

Statement	Mean	SD	Interpretation
Eco-ELT is relevant to ESP learning	4.73	0.45	Very High
Sustainability topics should be integrated into ESP	4.67	0.49	Very High
Eco-ELT enhances students' communication competence	4.53	0.52	Very High
Eco-ELT prepares students for future workplaces	4.60	0.51	Very High
Eco-ELT increases students' environmental awareness	4.80	0.41	Very High

As presented in Table 1, lecturers demonstrated overwhelmingly positive perceptions toward integrating Eco-ELT into ESP instruction. The highest-rated item concerned Eco-ELT's contribution to enhancing students' environmental awareness ($M = 4.80$), followed by its relevance to vocational English learning ($M = 4.73$). These findings indicate that lecturers recognize sustainability as an integral component of professional communication rather than an additional topic in English language instruction. This perception supports UNESCO's (2017) vision of Education for Sustainable Development and aligns with previous studies highlighting Eco-ELT as a transformative approach to language education (Saiful, 2023; Kazazoğlu, 2025; Yu et al., 2024).

Contextual ESP Learning Strengthens Green Communication Competence

The second finding shows that integrating sustainability themes into ESP activities

encourages the development of Green Communication Competence more clearly than language learning that is oriented towards linguistic aspects alone. In learning practice, lecturers develop various activities based on vocational contexts, such as case analysis on green tourism, preparation of sustainable business proposals, presentation of environmentally friendly technology, customer service simulations based on green hospitality, to discussions on the implementation of Sustainable Development Goals (SDGs) in various industrial sectors. These activities allow students to use English to solve authentic professional problems while building awareness of sustainability issues.

Table 2. Institutional Readiness for Eco-ELT Implementation

Aspect	Mean	Interpretation
Curriculum support	3.42	Moderate
Institutional policy	3.35	Moderate
Teaching materials	3.11	Moderate
Lecturer training	3.08	Moderate
Industry collaboration	3.57	High
Digital learning resources	3.29	Moderate

As presented in Table 2, institutional readiness for implementing Eco-ELT in Indonesian polytechnics was generally perceived as moderate, with mean scores ranging from 3.08 to 3.57, indicating that while sustainability has begun to receive institutional attention, its integration into ESP remains insufficiently systematic. Among the assessed dimensions, industry collaboration achieved the highest mean score ($M = 3.57$), suggesting that partnerships with industry provide authentic opportunities for contextualizing ESP through sustainability-oriented workplace communication, including green business practices, sustainable tourism, and environmentally responsible professional tasks. Conversely, curriculum support ($M = 3.42$), institutional policy ($M = 3.35$), digital learning resources ($M = 3.29$), teaching materials ($M = 3.11$), and lecturer training ($M = 3.08$) were only rated at a moderate level, implying that Eco-ELT implementation continues to rely largely on individual lecturers' initiatives rather than comprehensive institutional strategies.

These findings indicate that the successful integration of Eco-ELT requires more than lecturers' pedagogical commitment; it also depends on curriculum alignment, supportive

institutional policies, continuous professional development, the availability of sustainability-oriented teaching resources, and stronger digital and industry support systems. This result corroborates previous studies highlighting that sustainability-oriented TVET can only be effectively implemented through the integration of institutional leadership, curriculum reform, teacher capacity building, and industry collaboration, rather than isolated classroom innovation alone (Albertz & Pilz, 2025; Chinedu et al., 2023; Hadi et al., 2025; Ibrahim et al., 2024; Ismail et al., 2018; Jayaprakash, 2024; Mohamad et al., 2023; Moso et al., 2025; Zinn et al., 2019). Consequently, strengthening institutional readiness is essential for embedding Eco-ELT as a sustainable pedagogical approach capable of fostering Green Communication Competence and preparing vocational graduates to communicate effectively within environmentally responsible professional environments.

Institutional Support Determines Successful Eco-ELT Implementation

Although the lecturers showed high readiness for Eco-ELT, its implementation still faced various institutional challenges. Most of the respondents stated that Eco-ELT-based teaching materials are still very limited so that lecturers must develop various teaching materials that are relevant to their respective vocational fields. In addition, the unavailability of curriculum guidelines that explicitly integrate sustainability in ESP causes the implementation of Eco-ELT to be highly dependent on individual lecturers' initiatives.

Table 3. Major Challenges in Implementing Eco-ELT

Rank	Challenge	Frequency	Percentage
1	Limited Eco-ELT teaching materials	14	93.3
2	Lack of professional training	13	86.7
3	Limited curriculum integration	12	80.0
4	Students' English proficiency	10	66.7
5	Limited instructional time	9	60.0
6	Lack of assessment guidelines	8	53.3

Table 3 discussed about the implementation of Eco-ELT in Indonesian polytechnics continues to face several interconnected challenges despite lecturers' positive attitudes

toward sustainability-oriented language education. The most frequently reported barriers were the limited availability of Eco-ELT teaching materials (93.3%) and the lack of professional training (86.7%), followed by limited curriculum integration (80.0%), students' varying English proficiency (66.7%), restricted instructional time (60.0%), and the absence of clear assessment guidelines (53.3%). These findings suggest that the successful implementation of Eco-ELT is constrained not only by pedagogical issues but also by institutional and structural factors that hinder the systematic integration of sustainability into ESP instruction. The shortage of contextualized teaching resources and continuous professional development limits lecturers' ability to design authentic learning experiences that connect English language learning with environmental and vocational contexts. Likewise, fragmented curriculum integration and inadequate assessment frameworks reduce the consistency of Eco-ELT practices across vocational programs, while differences in students' language proficiency require lecturers to balance linguistic accessibility with the complexity of sustainability concepts. These findings are consistent with previous studies emphasizing that sustainability-oriented language education requires comprehensive institutional support, curriculum reform, teacher capacity building, and the development of context-specific instructional resources to ensure effective implementation (Chinedu et al., 2023; Ibrahim et al., 2024; Jayaprakash, 2024; Moso et al., 2025; Saiful, 2023; Zinn et al., 2019). Therefore, addressing these challenges through coordinated institutional policies and sustained professional development is essential for enabling Eco-ELT to effectively foster Green Communication Competence and prepare vocational graduates for the communication demands of sustainable industries.

A Pedagogical Framework for Eco-ELT in Indonesian Polytechnic

Based on the synthesis of quantitative and qualitative findings, this study proposes a pedagogical framework that connects four main components, namely Eco-ELT principles, ESP contextual learning, Green Communication Competence, and Sustainability-oriented workplace readiness. In this framework, the principles of Eco-ELT are the foundation for the development of learning materials based on environmental issues which are then implemented through contextual ESP activities according to the characteristics of each vocational study program. Through this process, students not only develop professional communication skills, but also build critical thinking skills on environmental issues,

conduct cross-disciplinary collaborations, and produce communication solutions that support sustainable development.

Table 4. Proposed Green Communication Competence Framework

Eco-ELT Dimension	ESP Learning Activities	Green Communication Competence Developed
Environmental Awareness	Reading sustainability reports	Ecological literacy
Critical Reflection	Group discussion on SDGs	Critical environmental thinking
Professional Communication	Business presentation on green innovation	Professional communication
Collaborative Learning	Project-Based Learning	Collaborative problem solving
Authentic Tasks	Green workplace simulation	Workplace communication
Reflective Learning	Learning journal	Responsible communication

As presented in Table 4, the proposed Green Communication Competence Framework illustrates how the integration of Ecological English Language Teaching (Eco-ELT) into English for Specific Purposes (ESP) can systematically develop sustainability-oriented communication competencies through interconnected pedagogical dimensions. The framework demonstrates that each Eco-ELT component is operationalized through contextualized ESP learning activities, beginning with environmental awareness developed through sustainability-related reading tasks, followed by critical reflection fostered through discussions on environmental issues and the Sustainable Development Goals (SDGs), professional communication enhanced through presentations and workplace simulations on green innovations, collaborative learning promoted via project-based activities addressing authentic environmental challenges, and reflective learning strengthened through learning journals that encourage responsible decision-making. Collectively, these pedagogical processes contribute to the development of Green

Communication Competence, which extends beyond linguistic proficiency to encompass ecological literacy, critical thinking, collaborative problem-solving, ethical responsibility, and professional communication skills required in sustainability-oriented workplaces. Unlike previous studies that primarily focused on environmental literacy, eco-pedagogy, or generic green skills, this framework positions Green Communication Competence as the central learning outcome of ESP by explicitly integrating language learning, vocational communication, and sustainability principles into a unified pedagogical model.

This finding extends the theoretical foundations of Eco-ELT proposed by Saiful (2023) and Stibbe (2022), while supporting the argument that English language education should contribute to Education for Sustainable Development (ESD) by enabling learners to communicate effectively about environmental issues in authentic professional contexts (UNESCO, 2017; Yu et al., 2024; Kazazoğlu, 2025). Furthermore, the framework aligns with recent scholarship emphasizing that vocational graduates require not only technical expertise but also sustainability communication competencies to meet the evolving demands of green industries and environmentally responsible workplaces (Albertz & Pilz, 2025; Fuchs, 2024; Ibrahim et al., 2024). Therefore, the proposed framework represents the principal contribution of this study by offering an evidence-based pedagogical model that bridges Eco-ELT, ESP, and Green Communication Competence, providing practical guidance for curriculum developers, ESP lecturers, and policymakers seeking to transform vocational English education in support of sustainable development.



Figure 1. A Conceptual Model for Integrating Eco-ELT into ESP to Foster Green Communication Competence

Figure 1 illustrates the proposed conceptual framework demonstrating how Eco-ELT serves as the pedagogical foundation for integrating sustainability principles into contextualized ESP learning, which is subsequently operationalized through authentic green communication tasks relevant to vocational settings. Through these learning experiences, students progressively develop Green Communication Competence, encompassing ecological literacy, critical thinking, ethical awareness, and professional communication skills required to address sustainability issues in workplace contexts. Ultimately, this pedagogical process contributes to the development of a sustainability-oriented workforce, positioning Eco-ELT as a transformative approach that connects language education, vocational training, and sustainable development while extending previous studies on Eco-ELT and Education for Sustainable Development (UNESCO, 2017; Stibbe, 2022; Saiful, 2023; Yu et al., 2024; Albertz & Pilz, 2025).

CONCLUSION

This study demonstrates that integrating Ecological English Language Teaching (Eco-ELT) into English for Specific Purposes (ESP) provides a practical and transformative pedagogical approach for fostering Green Communication Competence in Indonesian polytechnic education. The findings reveal that while ESP lecturers exhibit strong readiness and positive perceptions toward sustainability-oriented language instruction, effective implementation remains dependent on institutional support, including curriculum integration, professional development, teaching resources, and collaboration with industry. By embedding sustainability principles into contextualized ESP learning and authentic vocational communication tasks, Eco-ELT enables students to develop not only English language proficiency but also ecological literacy, critical thinking, ethical awareness, and professional communication skills required in environmentally responsible workplaces. Furthermore, this study introduces a conceptual framework that bridges Eco-ELT, contextualized ESP learning, authentic green communication tasks, and Green Communication Competence, thereby extending the pedagogical role of ESP beyond language acquisition toward preparing graduates capable of contributing to sustainable development. These findings offer valuable implications for educators, curriculum developers, and policymakers seeking to transform vocational English education into a more sustainable, industry-responsive, and future-oriented learning

ecosystem.

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