

THE IMPLICATION OF PHENOMENON BASED LEARNING IN TEACHING ENGLISH FOR SPECIFIC PURPOSES

Suyunbek Nazarov

The independent researcher of UzSWLU

suyunbek.nazar@gmail.com

Orcid-ID: 0009-0001-3992-8039

Abstract. Phenomenon-Based Learning (PhenoBL) represents a transformative pedagogical approach that integrates real-world phenomena as the foundation for interdisciplinary learning experiences. This article examines the implications of implementing PhenoBL in English for Specific Purposes (ESP) teaching contexts, exploring its pedagogical foundations, practical applications, benefits, and challenges. Through a comprehensive review of recent scholarly literature, this study analyzes how PhenoBL facilitates authentic language learning by connecting linguistic competence development with disciplinary content and real-world professional challenges. The findings reveal that PhenoBL enhances student engagement, promotes interdisciplinary collaboration, develops communicative competence, and prepares learners for authentic professional communication. However, implementation challenges include linguistic accuracy difficulties, the need for structured scaffolding, teacher preparation requirements, and institutional resource constraints. The article discusses various PhenoBL-aligned approaches including problem-based learning, project-based learning, Content and Language Integrated Learning (CLIL), and interdisciplinary collaboration models. Practical implications for ESP educators include the necessity of scaffolded instruction, targeted feedback mechanisms, authentic assessment strategies, and collaborative curriculum design. This review contributes to the growing body of knowledge on innovative ESP pedagogy and provides actionable recommendations for educators seeking to implement phenomenon-based approaches in diverse ESP teaching contexts.

Keywords: Phenomenon-Based Learning, English for Specific Purposes, Interdisciplinary learning, Authentic learning, Communicative competence.

1. Introduction

English for Specific Purposes (ESP) has evolved significantly from its traditional focus on specialized vocabulary and genre-specific language features to embrace more holistic, context-driven pedagogical approaches. In contemporary globalized professional environments, ESP learners require not only linguistic competence but also the ability to apply language skills in authentic, interdisciplinary contexts that mirror real-world professional challenges. Phenomenon-Based Learning (PhenoBL), an innovative pedagogical framework that organizes learning around real-world phenomena rather than traditional subject boundaries, offers promising implications for ESP instruction by bridging the gap between language learning and professional practice.

PhenoBL emerged from Finnish educational reforms and represents a shift from discipline-centered to phenomenon-centered learning, where students investigate complex, authentic



phenomena that require integration of knowledge and skills from multiple disciplines. In ESP contexts, this approach aligns naturally with the communicative and professional needs of learners who must navigate complex workplace situations requiring both linguistic proficiency and domain-specific knowledge. The integration of PhenoBL principles into ESP teaching has gained increasing attention from researchers and practitioners seeking to enhance learner engagement, develop authentic communicative competence, and prepare students for the multifaceted demands of professional communication in English.

Recent developments in ESP pedagogy have witnessed a convergence of PhenoBL with related approaches including problem-based learning (PBL), project-based learning, Content and Language Integrated Learning (CLIL), and interdisciplinary collaboration models. These approaches share common principles of authenticity, learner-centeredness, and integration of language with content, yet each offers distinct methodological features and implementation strategies. The GLOBE pedagogical model, for instance, integrates language learning with sustainability and social engagement through scaffolded instruction and real-world project development (Borgnia et al., 2025). Similarly, problem-based learning creates meaningful communication environments within ESP settings by linking language acquisition with disciplinary problem-solving (Mariotti, 2024).

The purpose of this article is to examine the implications of implementing PhenoBL in ESP teaching contexts, analyzing its theoretical foundations, pedagogical approaches, benefits, challenges, and practical applications. This review synthesizes recent scholarly research to provide ESP educators with evidence-based insights and actionable recommendations for integrating phenomenon-based approaches into their instructional practice. By exploring how PhenoBL facilitates authentic language learning through real-world phenomena, this article contributes to ongoing discussions about innovative ESP pedagogy and offers guidance for educators navigating the complexities of implementing interdisciplinary, phenomenon-centered instruction.

2. Literature Review

2.1 Theoretical Foundations of Phenomenon-Based Learning

Phenomenon-Based Learning represents a paradigm shift in educational philosophy, moving from traditional subject-based instruction to integrated, inquiry-driven learning organized around authentic real-world phenomena. The theoretical foundations of PhenoBL draw from constructivist learning theory, situated cognition, and sociocultural perspectives on learning, emphasizing that knowledge construction occurs most effectively when learners engage with authentic contexts and complex problems that require integration of multiple knowledge domains. In ESP contexts, this theoretical framework aligns with communicative language teaching principles and task-based language learning, which prioritize meaningful communication and authentic language use over decontextualized grammar instruction.

The implementation of PhenoBL in ESP settings is grounded in systemic functional linguistics, genre-based pedagogy, and interdisciplinary education. Borgnia et al. (2025) demonstrated how the GLOBE pedagogical model integrates these theoretical foundations by connecting language learning with sustainability and social engagement in an ESP course for veterinary medicine students. This model exemplifies how PhenoBL facilitates the development of communicative competence through scaffolded instruction that links language use to real-world professional and societal challenges. The theoretical premise is that language



learning becomes more meaningful and effective when embedded in authentic phenomena that require learners to apply linguistic resources to address complex, interdisciplinary problems.

Interdisciplinary approaches form a cornerstone of PhenoBL implementation in ESP contexts. Kalkayeva et al. (2025) emphasized that interdisciplinary ESP course design using professionally oriented situations enables tertiary engineering students to develop both linguistic and professional competencies simultaneously. This approach recognizes that professional communication in English rarely occurs in isolation from disciplinary content; rather, it is inherently intertwined with domain-specific knowledge, practices, and discourse communities. The theoretical foundation of this integration rests on the understanding that language is not merely a tool for expressing pre-existing knowledge but is constitutive of professional practice itself.

The concept of authentic learning, central to PhenoBL, emphasizes the importance of real-world relevance and professional applicability in ESP instruction. Karasaliu et al. (2025) explored how integrating translation, sustainability, and digital media in ESP education prepares real-world professionals by exposing learners to authentic professional tasks and contexts. This approach reflects the theoretical principle that learning transfer is enhanced when instructional contexts closely mirror the target contexts in which learners will apply their skills. Authentic learning in PhenoBL-informed ESP instruction involves not only using authentic materials but also engaging learners in authentic tasks, roles, and assessment practices that reflect professional communication demands.

2.2 ESP and Interdisciplinary Approaches

Interdisciplinary approaches in ESP teaching represent a natural alignment with PhenoBL principles, as both emphasize the integration of knowledge and skills across traditional disciplinary boundaries. The literature reveals multiple models for implementing interdisciplinary ESP instruction, each offering distinct advantages for developing learners' communicative and professional competencies. Shirokikh et al. (2017) investigated interdisciplinary approaches to teaching ESP through problem-based assignments, finding that such approaches facilitate the integration of language learning with content knowledge while promoting critical thinking and problem-solving skills. This integration is particularly valuable in ESP contexts where learners must navigate complex professional situations requiring both linguistic proficiency and disciplinary expertise.

Telecollaboration represents an innovative interdisciplinary approach that leverages digital technologies to create authentic communication contexts across disciplinary boundaries. Udeshini et al. (2023) examined an interdisciplinary telecollaboration project involving Business and Law students in an ESP classroom, demonstrating how such collaborations create opportunities for authentic professional communication while exposing learners to diverse disciplinary perspectives and discourse practices. The study revealed that telecollaboration enhances learner engagement and provides authentic contexts for developing professional communication skills, though it also presents challenges related to coordination, technology access, and assessment.

The integration of ESP with other academic disciplines extends beyond language and content to encompass broader educational goals including sustainability awareness, intercultural competence, and global citizenship. Borgnia et al. (2025) demonstrated how interdisciplinary integration in ESP instruction can address multiple learning objectives simultaneously, fostering not only linguistic competence but also sustainability awareness and



intercultural citizenship through engagement with real-world phenomena. This multidimensional approach reflects the complexity of professional communication in contemporary globalized contexts, where effective communication requires not only linguistic proficiency but also cultural sensitivity, ethical awareness, and understanding of global challenges.

Interdisciplinary ESP course design requires careful consideration of learning objectives, content selection, task design, and assessment strategies. Kurbanova (2024) emphasized that interdisciplinary approaches in ESP pedagogy promote learners' professional lexical competence by exposing them to authentic disciplinary discourse and terminology in meaningful contexts. The challenge for ESP educators lies in balancing language learning objectives with content learning goals while ensuring that neither domain is compromised. Successful interdisciplinary ESP instruction requires collaboration between language teachers and content specialists, shared understanding of learning objectives, and carefully designed scaffolding to support learners in navigating both linguistic and conceptual challenges.

2.3 Problem-Based and Project-Based Learning in ESP

Problem-Based Learning (PBL) and Project-Based Learning represent pedagogical approaches closely aligned with PhenobL principles, emphasizing authentic problems and projects as the foundation for learning. In ESP contexts, these approaches create opportunities for learners to develop communicative competence while engaging with realistic professional challenges. Kim (2023) investigated a PBL-based ESP teaching-learning model for engineering students, finding that problem-based approaches enhance both linguistic competence and professional problem-solving skills by situating language learning within authentic engineering contexts. The study demonstrated that PBL facilitates the development of technical communication skills while promoting critical thinking and collaborative learning.

The effectiveness of project-based learning in ESP instruction has been documented across diverse educational contexts and learner populations. Kavlu (2020) examined the effect of project-based learning on first-year undergraduate students in ESP courses, revealing significant improvements in learners' communicative competence, motivation, and engagement. The study found that project-based approaches provide authentic contexts for language use, promote learner autonomy, and facilitate the integration of multiple language skills in meaningful ways. These findings suggest that project-based learning aligns well with ESP learning objectives by creating opportunities for authentic communication and professional skill development.

Problem-based learning in ESP contexts requires careful design of problems that are both linguistically accessible and professionally relevant. Yuldasheva (2025) described the design of an ESP course for telecommunication engineers in the medical diagnostics industry using a problem-based learning approach, emphasizing the importance of selecting problems that reflect authentic professional challenges while providing appropriate linguistic scaffolding. The study highlighted that effective PBL implementation in ESP requires collaboration with industry professionals to ensure problem authenticity, careful sequencing of problems to support progressive skill development, and explicit attention to both linguistic and professional competencies.

The integration of problem-based and project-based approaches with other pedagogical strategies enhances their effectiveness in ESP instruction. Sadiyani et al. (2025) investigated improving English speaking fluency in engineering students through problem-based learning,

finding that PBL combined with explicit language instruction and structured practice opportunities yields superior outcomes compared to PBL alone. This finding underscores the importance of maintaining explicit focus on language development within problem-based and project-based approaches, ensuring that learners receive targeted support for developing linguistic accuracy and fluency alongside problem-solving and professional skills.

2.4 Content and Language Integrated Learning (CLIL)

Content and Language Integrated Learning (CLIL) represents a pedagogical approach that shares significant conceptual overlap with PhenoBL, emphasizing the integrated development of content knowledge and language skills. In ESP contexts, CLIL provides a framework for organizing instruction around disciplinary content while maintaining explicit focus on language development. The 4Cs Framework—communication, content, cognition, and culture—offers a comprehensive model for CLIL implementation that addresses multiple dimensions of learning. Tzoannopoulou (2014) demonstrated the application of the 4Cs Framework in an ESP Journalism course, showing how CLIL pedagogy promotes active and cooperative learning while integrating content and language through authentic materials and scaffolded instruction.

The effectiveness of CLIL in ESP instruction has been documented across diverse educational contexts and disciplinary domains. Research indicates that CLIL significantly improves students' motivation, vocabulary acquisition, critical thinking, and soft skills, making it an essential approach in modern ESP education. The integration of subject matter and language learning in CLIL enhances not only linguistic competence but also professional expertise, preparing students for real-world communication in global contexts. This dual focus on content and language aligns with the needs of ESP learners who must develop both linguistic proficiency and disciplinary knowledge to function effectively in professional contexts.

CLIL implementation in ESP contexts requires careful attention to material selection, assessment methods, and teacher preparation. Educators must select authentic materials that are both linguistically accessible and content-rich, design assessment strategies that evaluate both language and content learning, and develop their own competencies in both language pedagogy and disciplinary content. These requirements present challenges for ESP educators, particularly in contexts where language teachers may lack deep content knowledge or where content specialists may lack language teaching expertise. Successful CLIL implementation often requires collaborative teaching models and ongoing professional development.

The relationship between CLIL and phenomenon-based approaches in ESP instruction merits further exploration. Both approaches emphasize authentic, integrated learning experiences that connect language development with meaningful content. However, CLIL traditionally maintains clearer boundaries between language and content objectives, while PhenoBL emphasizes the investigation of complex phenomena that may transcend traditional disciplinary categories. The integration of CLIL principles with PhenoBL approaches in ESP instruction offers potential for creating rich learning experiences that develop linguistic competence, disciplinary knowledge, and interdisciplinary problem-solving skills simultaneously.

3. Discussion

3.1 Pedagogical Implications of PhenoBL in ESP

The implementation of Phenomenon-Based Learning in ESP contexts carries significant pedagogical implications for curriculum design, instructional practice, and assessment. The shift from traditional, skills-focused ESP instruction to phenomenon-centered approaches requires fundamental reconceptualization of learning objectives, content organization, and pedagogical strategies. Rather than organizing instruction around linguistic features or genre conventions, PhenoBL-informed ESP pedagogy organizes learning around authentic phenomena that require learners to mobilize linguistic resources in service of understanding and addressing complex, real-world challenges.

Scaffolding emerges as a critical pedagogical consideration in PhenoBL-informed ESP instruction. Borgnia et al. (2025) emphasized that students require structured support in writing, oral performance, and project conceptualization when engaging with complex, interdisciplinary phenomena. Effective scaffolding in PhenoBL contexts involves multiple dimensions: linguistic scaffolding to support language development, conceptual scaffolding to support content understanding, and procedural scaffolding to support task completion. The challenge for ESP educators lies in providing sufficient support to enable learner success while gradually releasing responsibility to promote learner autonomy and self-regulation.

The role of the ESP teacher transforms significantly in PhenoBL-informed instruction. Rather than serving primarily as a language expert who transmits linguistic knowledge, the ESP teacher in PhenoBL contexts functions as a facilitator of inquiry, a designer of learning experiences, and a guide who supports learners in navigating complex interdisciplinary challenges. This expanded role requires ESP educators to develop competencies beyond traditional language teaching expertise, including understanding of disciplinary content, ability to design authentic learning experiences, and skills in facilitating collaborative inquiry. Stoyanova (2021) emphasized that designing ESP courses requires careful consideration of principles and specificities that reflect both linguistic and professional learning objectives.

Assessment practices in PhenoBL-informed ESP instruction must align with the integrated, authentic nature of learning experiences. Traditional assessment approaches that isolate linguistic features or test decontextualized language knowledge are insufficient for evaluating the complex competencies developed through phenomenon-based approaches. Raikhanova et al. (2023) advocated for developing outcome-based learning curricula in ESP that specify clear learning outcomes and align assessment practices with those outcomes. Authentic assessment strategies such as portfolio assessment, performance-based assessment, and project evaluation offer more appropriate means of evaluating learners' ability to apply linguistic resources in addressing complex phenomena.

3.2 Benefits and Learning Outcomes

The implementation of PhenoBL approaches in ESP instruction yields multiple benefits for learners, educators, and educational institutions. Enhanced student engagement represents one of the most consistently reported benefits across diverse PhenoBL implementations. Rahmawati et al. (2025) explored learning motivation through contextual learning in ESP classes with automotive engineering students, finding that contextual, phenomenon-based approaches significantly enhance learner motivation and engagement by connecting language learning with personally and professionally relevant content. This enhanced engagement translates into increased effort, persistence, and ultimately improved learning outcomes.

The development of communicative competence represents a central learning outcome of PhenoBL-informed ESP instruction. Unlike traditional approaches that may develop linguistic



knowledge without corresponding communicative ability, PhenoBL approaches create authentic contexts for communication that require learners to mobilize linguistic resources in service of meaningful purposes. Borgnia et al. (2025) found that the GLOBE model fostered teamwork, interdisciplinary integration, and communicative competence by engaging learners in collaborative work that integrated content and objectives from multiple courses. This authentic communication practice develops not only linguistic accuracy and fluency but also pragmatic competence, strategic competence, and discourse competence essential for professional communication.

Interdisciplinary competence emerges as a valuable learning outcome of PhenoBL-informed ESP instruction. In contemporary professional contexts, effective communication often requires understanding of multiple disciplinary perspectives and ability to integrate knowledge across domains. Martynyuk et al. (2020) investigated interdisciplinary aspects of teaching ESP via bilingual projects, demonstrating that such approaches develop learners' ability to navigate multiple disciplinary discourses and integrate diverse knowledge sources. This interdisciplinary competence prepares learners for the complex communication demands of contemporary professional environments where disciplinary boundaries are increasingly fluid.

Professional skill development extends beyond linguistic competence to encompass broader professional competencies including critical thinking, problem-solving, collaboration, and digital literacy. Karasaliu et al. (2025) demonstrated how integrating translation, sustainability, and digital media in ESP education prepares real-world professionals by developing multiple competencies simultaneously. These broader professional skills enhance learners' employability and professional effectiveness, addressing the holistic development needs of ESP learners who must function in complex, technology-mediated professional environments.

3.3 Challenges and Implementation Barriers

Despite the significant benefits of PhenoBL approaches in ESP instruction, implementation faces multiple challenges and barriers that educators and institutions must address. Linguistic accuracy and fluency development present persistent challenges in phenomenon-based approaches where attention may focus primarily on content and communication rather than linguistic form. Borgnia et al. (2025) reported that students struggled with linguistic accuracy and oral fluency even while successfully engaging with complex interdisciplinary projects. This finding highlights the tension between meaning-focused communication and form-focused language development, suggesting the need for explicit attention to linguistic features within phenomenon-based approaches.

Teacher preparation and professional development represent significant implementation barriers. The expanded role of ESP teachers in PhenoBL contexts requires competencies that extend beyond traditional language teaching expertise. Educators must develop understanding of disciplinary content, ability to design authentic learning experiences, skills in facilitating collaborative inquiry, and competence in assessing complex, integrated learning outcomes. Many ESP teachers may lack preparation in these areas, necessitating substantial professional development investments. Furthermore, the collaborative nature of interdisciplinary ESP instruction requires teachers to work effectively with content specialists, requiring interpersonal and collaborative skills that may not be emphasized in traditional teacher preparation programs.



Institutional and resource constraints present practical barriers to PhenoBL implementation in ESP contexts. Phenomenon-based approaches often require more time, resources, and flexibility than traditional instruction. Designing authentic learning experiences, facilitating collaborative projects, and implementing authentic assessment strategies demand significant teacher time and effort. Additionally, PhenoBL approaches may require access to technology, authentic materials, and connections with professional communities that may not be readily available in all educational contexts. Institutional structures including rigid curricula, standardized assessments, and traditional scheduling may constrain educators' ability to implement phenomenon-based approaches effectively.

Balancing language and content objectives presents an ongoing challenge in PhenoBL-informed ESP instruction. While integration of language and content represents a core principle of phenomenon-based approaches, educators must ensure that language learning objectives receive adequate attention and that learners develop necessary linguistic competencies. The risk exists that content may dominate at the expense of language development, or conversely, that excessive focus on linguistic features may undermine the authentic, integrated nature of phenomenon-based learning. Khabirova (2025) emphasized the importance of using case study approaches to improve professional communication skills in ESP teaching, suggesting that carefully designed cases can balance language and content objectives effectively.

3.4 Practical Applications and Strategies

Successful implementation of PhenoBL approaches in ESP contexts requires careful attention to practical strategies and evidence-based practices. Case study approaches offer one effective strategy for implementing phenomenon-based learning in ESP instruction. Lyu (2023) investigated teaching ESP through case studies, examining design, teaching, and evaluation processes. The study found that case studies provide authentic contexts for language use while allowing educators to maintain focus on specific linguistic and professional learning objectives. Case studies can be carefully selected and designed to reflect authentic professional phenomena while providing appropriate linguistic scaffolding and explicit language instruction.

Contextual learning strategies enhance the effectiveness of PhenoBL approaches by connecting language learning with learners' specific professional contexts and needs. Rahmawati et al. (2025) demonstrated that contextual learning in ESP classes significantly enhances student motivation and engagement by making language learning personally and professionally relevant. Practical strategies for implementing contextual learning include conducting needs analyses to identify learners' specific professional communication needs, selecting phenomena that reflect authentic challenges in learners' target professional contexts, and designing tasks that require learners to apply language skills in ways that mirror professional practice.

Scenario-based instruction represents another practical approach for implementing PhenoBL principles in ESP contexts. Benhamlaoui (2024) explored reframing learner motivation in ESP contexts through scenario-based instruction, finding that scenarios provide authentic contexts for language use while supporting learner engagement and motivation. Scenarios can be designed to reflect complex professional phenomena that require learners to integrate linguistic, content, and strategic knowledge. Effective scenario design involves careful attention to authenticity, appropriate complexity level, clear learning objectives, and alignment with assessment practices.



Collaborative and cooperative learning strategies support PhenoBL implementation by creating opportunities for authentic communication and peer learning. Ismitasari et al. (2024) investigated empowering ESP students through a scientific approach, finding that collaborative approaches significantly impact engagement and achievement. Practical strategies for implementing collaborative learning in PhenoBL contexts include structuring group projects around authentic phenomena, assigning complementary roles that require interdependent collaboration, providing explicit instruction in collaborative skills, and implementing assessment strategies that evaluate both individual and group contributions.

Technology integration enhances PhenoBL implementation by providing access to authentic resources, facilitating collaboration, and enabling multimodal communication. Digital tools can support phenomenon-based learning by providing access to authentic professional texts and contexts, facilitating communication with professional communities, enabling collaborative project work, and supporting multimodal composition and presentation. However, technology integration must be purposeful and pedagogically grounded rather than technology-driven, ensuring that digital tools genuinely enhance learning rather than adding complexity without corresponding benefits.

4. Conclusion

This comprehensive examination of Phenomenon-Based Learning in English for Specific Purposes contexts reveals significant implications for ESP pedagogy, practice, and research. PhenoBL represents a transformative approach that aligns naturally with the communicative and professional needs of ESP learners by organizing instruction around authentic, real-world phenomena that require integration of linguistic competence with disciplinary knowledge and professional skills. The theoretical foundations of PhenoBL, grounded in constructivist learning theory, situated cognition, and sociocultural perspectives, provide robust support for its application in ESP contexts where authentic communication and professional relevance are paramount.

The literature review demonstrates that PhenoBL-aligned approaches including problem-based learning, project-based learning, CLIL, and interdisciplinary collaboration models offer effective frameworks for implementing phenomenon-centered ESP instruction. These approaches share common principles of authenticity, learner-centeredness, and integration of language with content, while offering distinct methodological features that educators can adapt to diverse teaching contexts and learner populations. The evidence indicates that PhenoBL approaches enhance student engagement, develop communicative competence, promote interdisciplinary learning, and prepare learners for authentic professional communication.

However, implementation of PhenoBL in ESP contexts faces significant challenges including linguistic accuracy development, teacher preparation requirements, institutional constraints, and the ongoing challenge of balancing language and content objectives. These challenges are not insurmountable but require careful attention, strategic planning, and sustained support. Successful implementation requires scaffolded instruction that provides explicit attention to linguistic features within authentic communication contexts, professional development that prepares teachers for expanded roles, institutional support that provides necessary resources and flexibility, and assessment practices that align with integrated learning objectives.

Practical applications and strategies for implementing PhenoBL in ESP contexts include case study approaches, contextual learning strategies, scenario-based instruction, collaborative

learning, and purposeful technology integration. These strategies provide concrete pathways for educators seeking to implement phenomenon-based approaches while addressing the challenges and constraints of their specific teaching contexts. The key to successful implementation lies not in rigid adherence to particular models or methods but in thoughtful adaptation of PhenoBL principles to local contexts, learner needs, and available resources.

Future research should continue to investigate the effectiveness of PhenoBL approaches across diverse ESP contexts, learner populations, and disciplinary domains. Longitudinal studies examining the long-term impact of PhenoBL on learners' professional communication competence and career success would provide valuable evidence of the approach's effectiveness. Additionally, research examining effective teacher preparation and professional development models for PhenoBL-informed ESP instruction would support broader implementation. Comparative studies investigating different models of PhenoBL implementation and their relative effectiveness would help educators make informed decisions about pedagogical approaches.

The implications of PhenoBL for ESP teaching extend beyond pedagogical practice to encompass broader questions about the purposes and goals of ESP education. As professional contexts become increasingly complex, interdisciplinary, and globally interconnected, ESP instruction must evolve to prepare learners for these multifaceted demands. PhenoBL offers a promising framework for this evolution, emphasizing authentic, integrated learning experiences that develop not only linguistic competence but also the broader professional competencies required for success in contemporary professional environments. By embracing phenomenon-based approaches, ESP educators can create learning experiences that are more engaging, more authentic, and more effective in preparing learners for the complex communication demands of professional practice.

References

1. Benhamlaoui, M. (2024). Reframing learner motivation in ESP contexts: Theoretical insights from scenario-based instruction. *International Journal of Modern Languages and Pedagogy*, 3(1). <https://doi.org/10.52919/ijmlsp.v3i01.88>
2. Borgnia, D., Pascual, M. E., & Porto, M. (2025). Language, sustainability, and intercultural citizenship: Implementing the GLOBE model in a disciplinary learning context. *Intercultural Communication Education*, 8(1). <https://doi.org/10.29140/ice.v8n1.102676>
3. Ismitasari, N., Sulistyowati, H., & Widiati, U. (2024). Empowering ESP students through a scientific approach: Unveiling the impact on engagement and reading comprehension achievement. *Edukatif: Jurnal Ilmu Pendidikan*, 6(5), 4726-4738. <https://doi.org/10.31004/edukatif.v6i5.7604>
4. Kalkayeva, G., Suleimenova, Z., Zhunussova, M., & Akhmetova, A. (2025). Interdisciplinary ESP course design for tertiary engineering students using professionally oriented situations. *Cakrawala Pendidikan: Jurnal Ilmiah Pendidikan*, 44(2), 371-384. <https://doi.org/10.21831/cp.v44i2.71163>
5. Karasaliu, A., Sinani, A., & Kamberi, L. (2025). Preparing real-world professionals: Integrating translation, sustainability, and digital media in English for Specific Purposes (ESP) education. *Studies in Media and Communication*, 13(4), 1-12. <https://doi.org/10.11114/smc.v13i4.7637>



6. Kavlu, A. (2020). The effect of project-based learning on first-year undergraduate students in English for specific purposes (ESP) courses. *International Journal of English Linguistics*, 10(4), 227-238. <https://doi.org/10.5539/IJEL.V10N4P227>
7. Khabirova, E. (2025). Using a case study approach to improve professional communication skills in teaching English for specific purpose. *Preprints*. <https://doi.org/10.20944/preprints202501.1344.v1>
8. Kim, H. (2023). Research on a PBL-based ESP teaching-learning model for engineering students. *English Teaching*, 29(3), 65-88. <https://doi.org/10.35828/etak.2023.29.3.65>
9. Kurbanova, S. (2024). Interdisciplinary approach in ESP pedagogy for promoting learner's professional lexical competence. *Academic Research in Educational Sciences*, 5(6), 164-170. <https://doi.org/10.36078/1735413989>
10. Lyu, B. (2023). Teaching English for specific purposes through case studies: Design, teaching, and evaluation. *Journal of Teaching English for Specific and Academic Purposes*, 11(2), 195-208. <https://doi.org/10.22190/jtesap2302250231>
11. Mariotti, C. (2024). English for Specific Purposes and problem-based learning: Strengths and opportunities. *International Journal of English Linguistics*, 14(2), 1-11. <https://doi.org/10.5539/ijel.v14n2p1>
12. Martynyuk, A., Smirnova, E., & Yuzhakova, Y. (2020). Interdisciplinary aspects of teaching English for specific purposes via bilingual projects. *Limba, Cultura, Comunicare*, 164-171. <https://doi.org/10.47743/lincu-2020-1-0164>
13. Rahmawati, D., Sulistyowati, E., & Widiati, U. (2025). Exploring learning motivation through contextual learning in ESP classes: A study on automotive engineering students. *Borneo Educational Journal (Borju)*, 7(2), 1-15. <https://doi.org/10.24903/bej.v7i2.2097>
14. Raikhanova, D., Akhmetova, A., & Suleimenova, Z. (2023). Developing an outcome-based learning curriculum in ESP. *Journal of Teaching English for Specific and Academic Purposes*, 11(3), 517-530. <https://doi.org/10.22190/jtesap230728041r>
15. Sadiyani, A., Sulistyowati, H., & Widiati, U. (2025). Improving English speaking fluency in engineering students through problem-based learning (PBL). *Journal of Language, Literature, Social and Cultural Studies*, 3(3), 1-12. <https://doi.org/10.58881/jllscs.v3i3.394>
16. Shirokikh, A., Guseva, A., & Pavlova, L. (2017). Interdisciplinary approach to teaching ESP: Problem-based assignment and students' feedback. *Eurasian Journal of Analytical Chemistry*, 12(7b), 1511-1517. <https://doi.org/10.12973/EJAC.2017.00288A>
17. Stoyanova, S. (2021). Designing ESP courses: Principles & specificities. *Training, Language and Culture*, 5(1), 62-74. <https://doi.org/10.24833/2687-0126-2021-3-1-62-74>
18. Tzoannopoulou, M. (2014). Rethinking ESP: Integrating content and language in the university classroom. *Procedia - Social and Behavioral Sciences*, 173, 149-153. <https://doi.org/10.1016/j.sbspro.2015.02.045>
19. Udeshini, W., Liyanage, I., & Bartlett, B. (2023). An interdisciplinary telecollaboration in ESP classroom: A study involving Business and Law students. In *EUROCALL 2023: CALL for all Languages* (pp. 394-399). <https://doi.org/10.4995/eurocall2023.2023.16977>



20. Yuldasheva, N. (2025). Designing an ESP course for telecommunication engineers in the medical diagnostics industry: A problem-based learning approach. *American Journal of Social Sciences and Humanity Research*, 5(7), 226-232. <https://doi.org/10.37547/ajsshr/volume05issue07-26>