



Development ESP in English Language Learning for Work Readiness in Aviation and Shipping Vocational Schools

Serina Serina^{1*}, Hendra Nugraha² 

^{1,2} English Language Education, Universitas Internasional Batam, Batam, Indonesia

E-mail addresses: 2261011@serina@uib.edu

ARTICLE INFO

Article history:

Received November 30, 2025

Revised December 10, 2025

Accepted December 12, 2025

Available online December 17, 2025

Kata Kunci :

Bahasa Inggris untuk Tujuan Khusus (ESP), Sekolah Kejuruan, Tantangan Mendengarkan dan Tata Bahasa

Keywords:

English for Specific Purposes (ESP), Vocational School, Listening and Grammar Challenges

ABSTRAK

Penelitian ini bertujuan untuk menginvestigasi kebutuhan pembelajaran bahasa Inggris siswa serta penggunaan teknologi dalam mendukung pembelajaran pada program vokasi penerbangan dan pelayaran. Dengan menggunakan pendekatan kualitatif, data dikumpulkan melalui observasi kelas dan wawancara semi-terstruktur untuk mengeksplorasi tantangan bahasa yang dihadapi siswa, preferensi pembelajaran, serta praktik pengajaran guru. Partisipan terdiri atas 16 siswa kelas XII dan satu guru bahasa Inggris dari sebuah sekolah vokasi di Batam. Temuan menunjukkan bahwa siswa mengalami kesulitan signifikan dalam keterampilan menyimak dan tata bahasa sehingga menurunkan kepercayaan diri mereka dalam berbicara, sementara pengajaran bahasa Inggris masih bersifat umum dan belum sesuai dengan tuntutan spesifik tiap jurusan. Teknologi tersedia di kelas namun digunakan secara minimal dan hanya sebatas presentasi dasar, bukan pembelajaran interaktif. Hasil penelitian ini menegaskan pentingnya penerapan pembelajaran bahasa Inggris berbasis profesi yang didukung alat digital interaktif untuk meningkatkan motivasi, mengembangkan kemampuan komunikasi, dan memperkuat kesiapan siswa memasuki dunia kerja penerbangan dan maritim. Secara keseluruhan, penelitian ini memberikan kontribusi melalui pemetaan kebutuhan belajar siswa dan penekanan pada pentingnya integrasi pembelajaran ESP yang terarah dengan pemanfaatan teknologi yang bermakna dalam konteks pendidikan vokasi.

ABSTRACT

This study aims to investigate students' English learning needs and the use of technology to support instruction in aviation and shipping vocational programs. Using a qualitative approach, data were collected through classroom observations and semi-structured interviews to explore students' language challenges, learning preferences, and teachers' instructional practices. The participants consisted of 16 twelfth-grade students and one English teacher from a vocational school in Batam. The findings reveal that students face significant difficulties in listening and grammar, which reduce their confidence in speaking, while English instruction remains general and not aligned with the specific demands of each department. Technology was available but used minimally and primarily for basic presentations rather than interactive learning. These results highlight the need to implement profession-oriented English learning supported by interactive digital tools to increase motivation, develop communication skills, and enhance students' readiness for the aviation and maritime workplace. Overall, this study contributes by providing insights into learners' specific needs and emphasizing the importance of integrating targeted ESP instruction with meaningful technology use in vocational contexts.

1. INTRODUCTION

In a vocational school in Batam, English classes in the aeronautical and maritime departments continue to use a basic English approach, although more specific instruction is required to meet the needs of these two fields. Interviews with students indicate difficulties in two main areas—listening and grammar. These difficulties affect their ability to understand spoken English and reduce their confidence in speaking, as they worry about making grammatical mistakes. Feelings of hesitation and embarrassment further limit their oral communication development. Therefore, it is important to develop more suitable teaching approaches that can prepare students with English skills relevant to the workplace.

Previous observations in the same school show that the current teaching practices still rely on general English rather than English for Specific Purposes (ESP). This condition highlights the need for a shift toward more specific and relevant learning approaches, especially considering the demands of the 21st century. ESP is an approach designed to help learners master English within particular academic or professional contexts. According to (Widianingsih & Listyaningrum, n.d.), ESP aims to prepare learners to use English effectively in specific disciplines and occupations so they can meet the particular goals required in their field.

ESP also contributes to the development of students' digital literacy because it requires learners to engage with English that is relevant to professional and technological contexts. (Belabcir, 2024) states that the growth of ESP is driven by increasing demands for English proficiency aligned with scientific and technological advancement. As these developments expand, learners need more focused language skills, including the ability to access, process, and use information through digital media. At the same time, rapid progress in Information and Communication Technology (ICT) has transformed educational practices, shifting from traditional instruction to approaches that encourage creativity, innovation, and learner engagement. Consequently, integrating ICT into English as a Foreign Language (EFL) classrooms has become increasingly essential (Marsevani & Zaki, n.d.).

Despite these developments, current English teaching practices at the vocational school do not yet incorporate ESP principles or meaningful use of digital tools. This creates a gap between classroom instruction and the communication skills required in the aviation and maritime industries. To address this gap, the present study investigates students' learning needs and explores the role of technology in supporting more profession-oriented English instruction.

2. METHODS

Research Design

This study employed a qualitative research design supported by descriptive numerical data. The qualitative approach was used to explore students' experiences, learning challenges, and perceptions through classroom observations and semi-structured interviews. Meanwhile, the numerical data—presented in percentages—served only as descriptive support to illustrate the distribution of students' learning preferences and skill needs, without conducting full quantitative analysis.

(Aspers & Corte, 2021) explain that qualitative research enhances understanding by bringing the researcher closer to the social phenomenon being studied. Similarly, (Lim, 2025a) notes that qualitative inquiry is not merely a method but a way to explore human experiences in depth, emphasizing context, participants' voices, and the meanings they construct. It seeks answers to questions such as “what,” “why,” “how,” and “in what context,” using flexible tools such as open-ended questions, in-depth interviews, and participant observation.

While quantitative research offers numerical descriptions, (Lim, 2025b) highlights that qualitative research captures the nuances and complexities of human experience that cannot be reduced to numbers. Rather than contradicting each other, qualitative and quantitative approaches can be complementary when used appropriately. In this study, the qualitative approach served as the main foundation, while descriptive numerical data supported the interpretation of findings.

Site and Participants

The participants consisted of 16 twelfth-grade students and one English teacher from an aviation and maritime vocational school in Batam. The student participants included 11 students from the Aviation department and 5 students from the Navigation (Shipping) department. Two students—one from each department—were selected for interviews to provide deeper insights into the specific learning difficulties they encountered.

Data Collection

Data were collected through classroom observations and semi-structured interviews. Observations were conducted on Wednesday, 30 October 2024, focusing on classroom activities, teacher–student interactions, and the use of technology during English instruction. Field notes were taken to document instructional practices and learning behaviours relevant to ESP-based learning.

Semi-structured interviews were conducted with two students and one English teacher. The student interviews explored challenges related to listening, grammar, and speaking confidence, as well as their preferences for English learning materials. The interview with the teacher aimed to gather information about instructional approaches, perceived student difficulties, and the role of technology in supporting the learning process.

Instrument

The instruments used in this study consisted of classroom observations, semi-structured interviews, and a short descriptive questionnaire. Classroom observations were conducted using field notes and an observation protocol to document teaching activities, teacher–student interaction, and the use of technology during the English lesson. Semi-structured interviews were administered to three participants: two students—one female from the Navigation (Shipping) department and one male from the Aviation department—and one English teacher. These interviews explored students’ learning difficulties, skill needs, and perceptions of technology use, as well as the teacher’s views on instructional practices and challenges in implementing ESP-oriented teaching. Additionally, a short closed-ended questionnaire was distributed to all sixteen students in the class to gather descriptive numerical data on their learning preferences and perceptions of the usefulness of various English skills. The questionnaire responses were later converted into percentages and presented in Tables 1 and 2 to support the qualitative findings. All interviews were audio-recorded with consent, transcribed for analysis, and anonymized to ensure confidentiality.

Research Setting

The study took place in a classroom equipped with basic technological tools such as a projector and air conditioning. Although the projector screen was relatively small, it was sufficient to support basic instructional media use. Students were allowed to use their mobile phones with teacher approval, providing additional access to digital learning tools. The physical aspects of the classroom were considered only insofar as they influenced technology integration and learning conditions.

Data Analysis

Qualitative data from observations and interviews were analysed through thematic analysis, enabling patterns related to learning challenges, instructional practices, and technology use to emerge. Descriptive numerical data—such as percentages of student responses in Tables 1 and 2—were used to complement the qualitative findings and illustrate general trends in students’ English learning preferences and perceived skill usefulness.

3. RESULT AND DISCUSSION

Results

Table 1. Percentage of Students' Responses on English Learning Preferences

No	Questions	Strongly Disagree (SD)	Disagree (D)	Agree (A)	Strongly Agree (SA)
1.	Why is English needed for learning?	0%	7%	21%	71%
2.	Why is English needed for work?	0%	14%	29%	57%
3.	The develop you wish to develop your listening skill in English.	0%	0%	29%	71%
4.	The develop you wish to develop your speaking skill in English.	0%	21%	43%	36%
5.	The develop you wish to develop your writing skill in English.	0%	0%	50%	50%
6.	The develop you wish more focus on grammar in English.	0%	29%	29%	43%
7.	The develop you wish to improve my vocabulary.	0%	29%	29%	43%
8.	materials needed by student for English learning.	0%	14%	29%	57%
9.	Student prefer individual learning for English lessons.	0%	21%	21%	57%
10.	Student find practice methods more effective for learning English.	0%	7%	21%	71%
11.	Conversation activities help improve student English skills.	0%	14%	43%	43%
12.	Teacher-centered teaching methods work best for student.	0%	0%	40%	60%

Table 2. How Useful are the Following Skills for Students' Future English Abilities

No	Questions	Not Useful (NS)	Slightly Useful (SU)	Useful (U)	Strongly Useful (SA)
1.	Reading English business documents/business email	0%	44%	31%	25%
2.	Reading English article on the internet	0%	31%	19%	50%
3.	Reading English Textbooks	0%	0%	62%	38%
4.	Listening in meetings or small-group discussions at work with English-Speaking members	0%	0%	56%	44%
5.	Listening to a speech in a conference/presentation given in English	0%	44%	19%	37%
6.	Speaking informally in English with Foreign tourist	19%	25%	6%	50%
7.	Giving formal speeches/presentation in English	0%	6%	56%	38%
8.	Writing English business documents/business email	0%	6%	19%	75%
9.	Writing English reports	13%	0%	54%	33%

Discussion

This discussion elaborates on the findings reported earlier by linking students identified difficulties with established concepts of ESP and effective learning strategies. The findings of this study indicate that students experience substantial challenges in listening comprehension and grammar accuracy, which directly reduce their confidence in speaking. Students often feel anxious about mispronouncing words or using incorrect grammar, leading to hesitation and avoidance of oral communication. Another issue that emerged is the general nature of English instruction, as students from the Aviation and Navigation departments receive the same materials despite having different professional needs. This mismatch highlights the need for more targeted and profession-oriented English learning.

In addressing these challenges, English for Specific Purposes (ESP) provides a framework that aligns language instruction with learners' academic or professional goals. ESP emphasizes teaching linguistic features and communication skills that are directly relevant to a specific field, such as engineering, tourism, or aviation (Fadlia et al., 2020; Kurniawati et al., 2024). For vocational students, ESP helps ensure that English learning supports the terminology, communication tasks, and workplace interactions they are likely to encounter. By applying ESP principles, English instruction in aviation and maritime programs can focus more on listening exercises using industry-specific audio materials, as well as grammar activities contextualized to technical communication, thereby addressing the core difficulties identified in the findings.

Student interviews also revealed issues of shyness and lack of confidence in speaking. As suggested by (Oscar, 2022) interactive methods such as role-play and small-group speaking tasks can create a supportive environment that encourages students to communicate without fear of being judged. Role-play allows learners to practice real-world communication scenarios, making them more comfortable with speaking while simultaneously increasing motivation and engagement.

Technology integration also plays a crucial role in supporting ESP-based instruction. Although classroom technology such as projectors and mobile phones was available, its use remained limited to basic presentations. This underutilization reduces opportunities for interactive learning. Technology can enhance ESP instruction by providing field-specific listening materials, simulations, and digital speaking activities that replicate workplace communication. As (Teresa et al., 2024) note, educational technology supports teachers not only in organizing instruction but also in creating more engaging learning environments. When used effectively, digital tools can strengthen students' language skills, increase participation, and better prepare them for communication demands in aviation and maritime industries.

Overall, the challenges identified in listening, grammar, confidence, and limited technology use suggest the need for a more integrated approach combining ESP-based materials, interactive speaking

activities, and digital tools. This combination can support students' linguistic development while ensuring that English learning aligns with their future workplace requirements.

4. CONCLUSION

The findings of this study indicate that students in the aviation and maritime vocational school face significant challenges in listening comprehension and grammatical accuracy. These difficulties are accompanied by low confidence, which affects their willingness to speak in English. Moreover, the current English instruction remains general and does not address the distinct needs of each department. This gap limits students' preparedness for the communication demands of their future professional fields.

The results highlight the importance of adopting an English for Specific Purposes (ESP) approach, as it enables the development of learning materials and activities that align with students' professional contexts. Integrating ESP-based content—such as aviation communication or maritime terminology—can better support the development of relevant language skills. In addition, the use of encouraging strategies, such as small-group speaking practice, can help build students' confidence.

Finally, incorporating more interactive technology into English lessons can enhance student engagement and support individualized learning. Strengthening the combination of ESP-focused instruction and technology-enhanced activities can provide students with more meaningful learning experiences and improve their readiness to communicate effectively in the aviation and maritime industries.

5. ACKNOWLEDGE

The researcher would like to express his deepest gratitude to all parties who have helped in preparing this article. Especially to the students of class SMK 12 Batam who were willing to take the time to participate in observations and interviews, as well as to the English teacher who provided very useful information regarding the learning process in class. Thank you also to the school for giving permission to carry out this research. Without support from all these parties, this research would not have been completed and gone well.

6. REFERENCES

- Aspers, P., & Corte, U. (2021). What is qualitative in research. In *Qualitative Sociology* (Vol. 44, Issue 4, pp. 599–608). Springer. <https://doi.org/10.1007/s11133-021-09497-w>.
- Belabcir, S. (2024). Investigating engineering students' needs for ICT integration in ESP classes. *Journey: Journal of English Language and Pedagogy*, 7(1), 122–139. <https://doi.org/10.33503/journey.v7i1.4001>.
- Fadlia, F., Zulida, E., Asra, S., Rahmiati, R., & Bania, A. S. (2020). English subject on english for specific purposes (esp) in vocational schools. *Language Literacy: Journal of Linguistics, Literature, and Language Teaching*, 4(2), 358–367. <https://doi.org/10.30743/ll.v4i2.3064>.
- Kurniawati, A. E., Rohmah, Z., & Kurniawati1, A. E. (2024). Teaching multimodal texts in an ESP class using interacty and padlet *Pengajaran Teks Multimodal dalam Kelas ESP Menggunakan Interacty dan Padlet*.
- Lim, W. M. (2025a). What is qualitative research? an overview and guidelines. *Australasian Marketing Journal*, 33(2), 199–229. <https://doi.org/10.1177/14413582241264619>
- Lim, W. M. (2025b). What is qualitative research? an overview and guidelines. *Australasian Marketing Journal*, 33(2), 199–229. <https://doi.org/10.1177/14413582241264619>
- Marsevani, M., & Zaki, B. (n.d.). Examining efl teachers' perspectives: enhancing learning through technology-integrated instruction. <https://doi.org/10.29300/ling.v10i2.5390>
- Oscar. (2022). 29-32....IJP...N....the+importance+of+role-playing+game+in+teaching+english+in+a+non-linguistic+university.
- Teresa, A., Febria, D., & Marsevani, M. (2024). EFL Teachers' perception toward integration of technology in the 2013 curriculum and independence curriculum. In *Journal of English Education and Teaching* (Vol. 8, Issue 2).
- Widianingsih, B., & Listyaningrum, D. R. (n.d.). A need analysis of english learning for designing english curriculum and worksheet (A Case Study for the sixth semester of Electrical Engineering Students in the Academic Year of 2015/2016 at State Polytechnic of Cilacap).