

Needs Analysis of English for Specific Purposes for Occupational Health and Safety Students in Higher Education

Eka Indah Nuraini^{1*}, Hesti Rokhaniyah², Muhammad Faiz Al-Fikry³

Universitas Darussalam Gontor^{1,2,3}

email: ekaindahnuraini@unida.gontor.ac.id¹, hesti.r@unida.gontor.ac.id², mohammadfaizal-fikry60@student.tbi.unida.gontor.ac.id³

e-mail corresponding author: ekaindahnuraini@unida.gontor.ac.id

Received : 19-02-2026

Revised : 24-03-2026

Accepted : 31-03-2026

Abstrak – Penelitian ini bertujuan untuk mengidentifikasi kebutuhan pembelajaran Bahasa Inggris untuk Tujuan Khusus (ESP) mahasiswa jurusan Kesehatan dan Keselamatan Kerja (KKK) guna merancang bahan ajar yang relevan. Penelitian ini menggunakan desain survei yang melibatkan 30 mahasiswa KKK dan seorang dosen ESP di Universitas Darussalam Gontor. Data dikumpulkan melalui kuesioner dan wawancara semi-terstruktur, kemudian dianalisis menggunakan statistik deskriptif dan analisis kualitatif. Temuan menunjukkan bahwa mahasiswa sangat menyukai pembelajaran yang berorientasi pada komunikasi, terutama keterampilan berbicara untuk interaksi di tempat kerja, dan menekankan pentingnya menguasai kosakata yang berkaitan dengan KKK. Namun, bahan ajar ESP yang ada saat ini dianggap tidak memadai karena relevansinya yang terbatas terhadap konteks khusus KKK. Mahasiswa juga mengemukakan kebutuhan akan bahan ajar yang dikontekstualisasikan dengan memasukkan tugas-tugas kehidupan nyata, standar keselamatan internasional, dan penilaian berbasis kinerja. Singkatnya, penelitian ini menyoroti perlunya mengembangkan bahan ajar ESP yang spesifik konteks, berbasis tugas, dan selaras dengan tuntutan komunikasi profesional di bidang KKK. Temuan ini memberikan landasan empiris untuk merancang buku teks Bahasa Inggris untuk Kesehatan dan Keselamatan Kerja (EOHS) yang lebih mendukung kesiapan mahasiswa dalam berkomunikasi di tempat kerja global.

Kata Kunci: Analisis Kebutuhan, ESP, mahasiswa KKK

Abstract – This study aims to identify the English for Specific Purposes (ESP) learning needs of students majoring in Occupational, Health, and Safety (OHS) in order to design relevant teaching materials. This study employed a survey design involving 30 OHS students and an ESP instructor at Darussalam Gontor University. Data was collected through questionnaires and semi-structured interviews, then analyzed using descriptive statistics and qualitative analysis. The findings indicate that students strongly prefer communication-oriented learning, particularly speaking skills for workplace interactions, and emphasize the importance of mastering vocabulary related to OHS. However, current ESP teaching materials are considered inadequate due to their limited relevance to the specific OHS context. Students also expressed a need for contextualized teaching materials that incorporate real-life tasks, international safety standards, and performance-based assessments. In summary, this study highlights the need to develop context-specific, task-based ESP teaching materials aligned with the demands of professional communication in the OHS field. These findings provide an empirical foundation for designing an English for Occupational Health and Safety (EOHS) textbook that better supports students' readiness to communicate in global workplaces.

Keywords: Need analysis, ESP, OHS students

INTRODUCTION

In the era of globalized workplaces and rapid industrial development, the ability to communicate effectively in English has become an essential skill for college graduates to thrive in professional settings (Indriana et al., 2016; Nuraini et al., 2024). This requirement is particularly relevant for students in the field of Occupational, Health, and Safety (OHS) who are responsible for conveying safety information, regulations, standards, and emergency procedures in the workplace. The ability to convey this information accurately is crucial for ensuring the safety and well-being of employees at work. Given the growing importance of English proficiency in the OHS field, the OHS department at Darussalam Gontor University (UNIDA Gontor) has incorporated English for Specific



Purposes (ESP) as a required course for third-semester students. This course is intended to equip students with the English language skills needed in their future professional contexts. However, limited English proficiency, particularly regarding OHS-specific terminology and professional communication, may hinder students' ability to access international OHS information and standards (Matisāne et al., 2022). Consequently, inadequate English proficiency may reduce OHS students' readiness to meet future workplace communication demands.

In higher education context, students' professional competencies are often developed through theoretical learning and practical experience. Classroom instruction frequently relies on textbooks as the primary teaching resource. Previous research indicated that textbooks play a crucial role in supporting language learning by providing structured learning materials and activities (Rahmayani et al., 2018). Unfortunately, the OHS department at UNIDA Gontor has not yet developed an ESP textbook specifically designed for OHS students. The English materials currently used in the department are the IELTS Listening & Reading and IELTS Writing & Speaking books developed by UNIDA Gontor. Although these materials support general English proficiency, they do not fully meet the specialized language needs of OHS students because they focus more on general English than on discipline-specific communication. In fact, the English used in the OHS field contains specialized vocabulary and professional discourse that are rarely covered in general English textbooks (Haryati et al., 2018). OHS students require learning materials relevant to their professional context, including technical terminology, safety procedures, workplace accident reports, and workplace communication practices (Haryati et al., 2018; Haryati et al., 2020; Akkar & Idri, 2021). Without appropriate ESP learning materials specifically designed for the OHS field, students may struggle to understand technical terms related to workplace safety, interpret safety guidelines written in English, and effectively communicate safety procedures in the workplace. As a result, their ability to access international occupational safety and health resources and communicate professionally within the global occupational safety and health community is limited.

In response to these challenges, ESP has emerged as a key consideration and a crucial approach in developing language instruction that meets communicative needs in specific academic and professional fields. ESP emphasizes the alignment between language learning and the actual communication practices required in professional settings (Basturkmen, 2019; Hyland, 2022). In higher education, this approach is highly relevant because students are expected to acquire language competencies that support their future careers. One of the fundamental stages in designing an ESP course is needs analysis, which aims to identify the specific language skills and communication tasks required by learners in their academic and professional fields (Anthony, 2018; Basturkmen, 2019). Through needs analysis, educators can identify the gap between students' current language competence and the communicative demands they will face in actual professional situations.

Needs analysis is often described as a systematic process of collecting and analyzing data on learners' language needs, expectations, motivations, and learning contexts in order to design effective language programs (Brown, 2006; Long, 2015). In the ESP context, needs analysis also involves identifying the communication tasks, professional discourse, and technical terminology that learners must master within their fields of expertise (Hyland, 2022). In this study, the analysis focuses on four dimensions of learner needs: target situational needs, functional needs, learning needs, and assessment needs. Target situational needs refer to the language skills learners are expected to demonstrate in their future professional contexts. Functional needs relate to the linguistic functions and language resources required to perform specific tasks in the workplace. Learning needs relate to the learning strategies, activities, and instructional materials that best support learners' language development. Meanwhile, assessment needs refer to the appropriate forms of assessment and feedback mechanisms required to measure students' learning progress and language competence. Understanding these aspects is crucial to ensuring that ESP courses and learning materials align with the actual professional demands faced by students (Basturkmen, 2019; Belcher, 2009).

Several previous studies related to needs analysis in ESP have been conducted. Masoumpanah & Tahririan (2013) conducted a situational needs analysis for tourism students through surveys and interviews with employees working at several hotels. Their findings highlighted the importance of aligning English language instruction with workplace communication tasks. However, their research was conducted in the tourism sector and did not address the needs of students in the field of OHS. In the Indonesian context, Haryati et al. (2018) and Haryati et al. (2020) accomplished needs analyses for OHS students in higher education and explored English language requirements from both academic and industry perspectives. Nevertheless, their studies were primarily aimed at identifying general English language needs, rather than providing a comprehensive analysis that integrates the various dimensions of learners' needs in the development of ESP courses. Similarly, Akkar & Idri (2021) investigated the current implementation of ESP in Health, Safety, and Environment (HSE) programs and reported several challenges faced by beginner learners. However, their research primarily focused on learners' difficulties and attitudes toward ESP courses, rather than on a comprehensive examination of the learning needs required to

develop instructional materials. In addition, Syaiful (2022) analyzed curriculum needs among graduate students in the English Language Education Program and highlighted the importance of aligning the learning process with professional competencies. Although relevant to curriculum development, this study did not specifically address ESP needs in professional disciplines such as OHS.

Although previous studies have examined ESP needs in various professional contexts, research specifically examining the ESP needs of OHS students at Indonesian universities remains limited, particularly regarding the development of teaching materials tailored to specific contexts. Most previous studies have focused on workplace communication demands or general ESP learning needs without integrating various dimensions of learner needs into a single framework. Therefore, a comprehensive needs analysis is still required that examines target situational needs, functional needs, learning needs, and assessment needs simultaneously to support the development of ESP teaching materials specifically designed for OHS students.

This study aims to address this research gap by conducting a comprehensive needs analysis of OHS students at UNIDA Gontor. The findings of this study are expected to provide an empirical foundation for developing an ESP textbook tailored to the specific communication needs of OHS students. By identifying students' target situational needs, functional needs, learning preferences, and evaluation expectations, this study contributes to ESP research in Indonesian higher education and provides practical guidance in designing contextual ESP teaching materials. Based on the issues described above, this study seeks to answer the following research question: What are the ESP learning needs of OHS students at Universitas Darussalam Gontor?

RESEARCH METHODOLOGY

This study employs a survey research design to investigate and identify the specific needs of OHS students regarding the development of an ESP textbook tailored to their English language learning needs, particularly in terms of key terminology and concepts in the field of OHS. Survey research is suitable for investigating respondents' self-reported perceptions, experiences, and learning needs (Sugiono, 2015). The participants in this study were 30 third-semester OHS students enrolled in the OHS Department at Darussalam Gontor University for the 2024–2025 academic year, along with an ESP lecturer who teaches the course. Participants were selected using a purposive sampling technique. This technique was chosen because the researchers intentionally selected students who had taken or were currently taking an ESP course to ensure that the participants had relevant experience with ESP learning within the OHS program. The ESP instructor was also selected purposively due to her direct involvement in teaching ESP to OHS students and their in-depth knowledge of the existing teaching materials and classroom practices.

This study utilized two research instruments: a questionnaire and semi-structured interviews. The questionnaire consisted of 14 items designed to explore the ESP learning needs of OHS students based on the ESP needs analysis framework. These items were grouped into four dimensions: target situational needs (3 items), functional needs (3 items), learning needs (3 items), and evaluation needs (5 items). The questionnaire used a multiple-choice format, in which each item provided five answer options, and participants were asked to select the option that best represented their perception by checking (√) the corresponding box. These items were developed based on the theoretical framework of ESP needs analysis and adapted to reflect communication tasks, learning preferences, and assessment practices relevant to the OHS context. For example, some items ask students to identify their primary goals in learning ESP, the types of learning materials they prefer, and the forms of assessment they consider most effective in evaluating their English language proficiency.

Before the questionnaire was distributed, its content validity was assessed through expert review involving an ESP instructor to ensure that the items accurately represented the ESP needs analysis framework. The questionnaire's reliability was tested using Cronbach's Alpha and yielded a reliability coefficient of 0.81, indicating a high level of internal consistency and suggesting that the questionnaire is suitable for data collection. The questionnaire was distributed in printed format during class time. Thirty OHS students were asked to complete the questionnaire in approximately 15 minutes. Finally, the data from the questionnaire were analyzed using descriptive statistics in the form of percentages to identify general patterns in students' responses regarding their ESP learning needs.

In addition to the questionnaire, semi-structured interviews were also conducted with five OHS students and one ESP instructor to gain deeper insight into the needs and challenges in ESP learning. The interviews with OHS students aimed to explore their experiences in studying ESP, the difficulties they faced in understanding ESP material, and their expectations regarding ESP instruction relevant to their field of study. Meanwhile, the interview with the ESP instructor was intended to gain professional insights into current ESP teaching practices, the

language needs perceived by OHS students, and the suitability of existing teaching materials to support students' academic and professional communication. The interviews were conducted individually in a face-to-face setting using a semi-structured interview guide to ensure consistency while allowing participants to elaborate on their answers. Each interview lasted approximately 20–30 minutes. With the participants' consent, the interview sessions were recorded using a smartphone to ensure accurate data collection. The recordings were then transcribed for analysis.

The qualitative data obtained from the interviews were analyzed using the interactive model proposed by Miles and Huberman (1984), which includes data reduction, data presentation, conclusion, and verification. During the data reduction stage, the researchers reviewed the interview transcripts and identified relevant statements regarding students' ESP needs. These statements were then coded and categorized according to the four dimensions of needs analysis (target situational needs, functional needs, learning needs, and evaluation needs). In the presentation stage, the categorized data were organized into thematic summaries to facilitate interpretation. Finally, conclusions were drawn and verified by comparing the qualitative findings with the quantitative results obtained from the questionnaire.

To enhance the credibility of the findings, methodological triangulation and source triangulation were conducted by comparing information obtained through various data collection techniques (questionnaires and interviews) and from various respondents (students and ESP instructors). This triangulation process helped ensure the consistency and validity of the research findings.

RESULTS AND DISCUSSION

1. Target Situational Needs

The targeted situational needs refer to the language requirements that learners are expected to meet in their future professional contexts. In this study, 30 third-semester OHS students were asked for their opinions on three matters: their goals in studying ESP, their perceptions of the importance of ESP in the OHS sector, and the competencies they feel they possess in relation to the OHS sector.

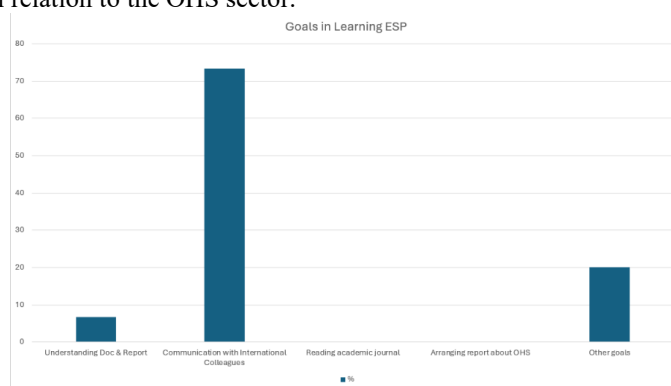


Figure 1. Goals in Learning ESP

Figure 1 illustrates the students' objectives in studying ESP. The majority of students (73.33% or 22 OHS students) reported that their primary objective in studying ESP was to communicate with their international peers. Meanwhile, 6.67% of students (2 OHS students) stated that they were studying ESP to understand technical documents and reports related to occupational safety and health. In addition, 20% of students (6 OHS students) cited other objectives, including improving their public speaking skills. These findings were supported by an interview with students S1:

“I learn English because I want to be able to have good public speaking. I think it is important for our work in the future.” (S1/Int-3)

The findings indicated that most OHS students viewed English primarily as a tool for professional communication in an international work environment. Their main objectives in studying ESP were to communicate effectively with international colleagues, access safety documentation, and convey safety-related information. This perception reflected target-oriented needs, particularly necessities, where language learning was driven by the demands of specific work contexts, such as safety officers who were required to interact with multinational teams and understand international documentation. Long (2015) supported the view that these communicative demands

also align with real-world work tasks, such as reporting incidents and delivering safety briefings, indicating that ESP instruction should be based on task-based activities relevant to the workplace. In line with Hyland (2022), ESP is inherently shaped by the communicative practices of specific discourse communities where language functions as a tool for professional proficiency, not general proficiency. Therefore, this study suggests that ESP materials for OHS students should not only address communicative competencies but also integrate discipline-specific discourse and international standard practices that align language learning with the broader professional ecosystem in the field of occupational safety.

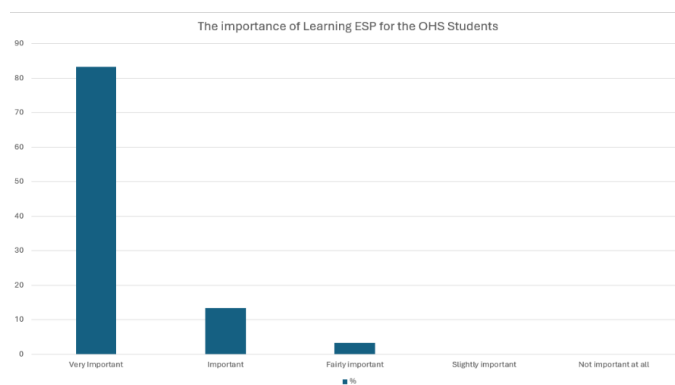


Figure 2. The Importance of Learning ESP for OHS Students

Figure 2 illustrates students' perceptions of the importance of ESP learning for the OHS sector. The research findings revealed that the majority of participants (83.33% or 25 OHS students) considered ESP learning to be very important for their future careers as OHS specialists. While, 13.33% of students (4 OHS students) considered it important. Only a small proportion of students (3.33% or 1 OHS student) considered ESP learning somewhat important. These findings stressed that OHS students had a strong awareness of the importance of ESP for their future careers, indicating high instrumental motivation. This aligns with the target needs where learners clearly recognize language demands in the workplace, particularly that ESP learners are goal-oriented within professional discourse communities. Compared to Akkar & Idri (2021) and Haryati et al. (2020), the current findings confirmed high learner motivation but also revealed a gap between awareness and available materials. Therefore, ESP design must be more aligned with authentic professional needs to translate motivation into practical competencies.

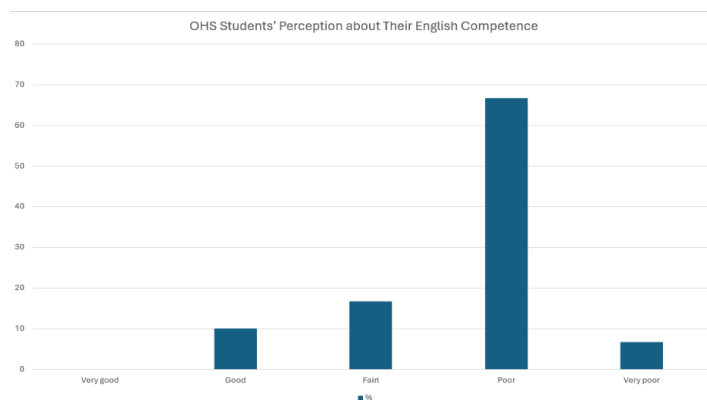


Figure 3. OHS Students' Perception about Their English Competence

Students' perceptions of their English language proficiency related to the OHS sector were presented in Figure 3. The research findings showed that 66.67% of students (20 OHS students) rated their English proficiency regarding OHS terminology and communication as still low. This perception was also reflected in the results of an interview with student S3 who stated:

“My English, especially about the OHS sector, is bad. I need to study more. Many English vocabulary words about the OHS sector that I do not know. It makes English more difficult for me.” (S3/Int-5)

The findings exposed a significant gap between students' awareness of the importance of ESP and their low perception of their competence in English, specifically in terms of terminology and communication. It implied a mismatch between students' current proficiency and expected professional demands. From an ESP perspective, it

suggested that existing instruction may not sufficiently cover the specialized vocabulary and communicative functions essential for workplace performance. In line with Akkar & Idri (2021) and Masoumpanah & Tahririan (2013), these findings confirmed that students often struggle with professional communication due to limited exposure to specialized language. Although previous studies have primarily focused on the importance of English for professional communication, this research highlighted the competency gaps experienced by OHS students within the context of Indonesian higher education, indicating the need for specially designed ESP materials to bridge these gaps through contextualized communication tasks. Therefore, ESP curriculum design must prioritize systematic vocabulary development, contextualized practice, and confidence-building activities to ensure that students can bridge the gap between their current abilities and workplace communication demands.

2. Functional needs

The term “functional needs” concerns to the types of functions and linguistic resources that students need to perform specific tasks in their professions. In this section, the participants were asked three questions regarding the learning materials they need in their ESP course, the importance of speaking skills, and how often they use English in contexts related to OHS.

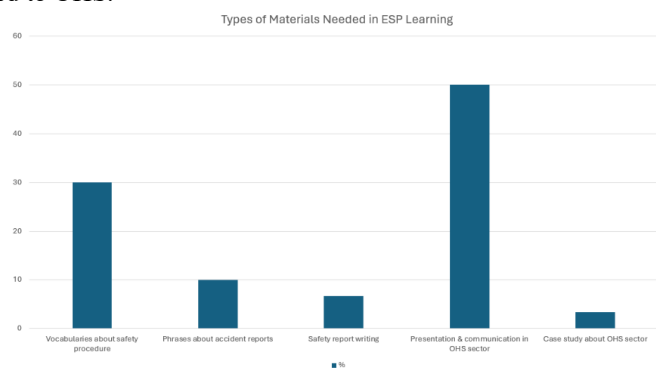


Figure 4. Types of Materials Needed in ESP Learning for OHS Sector

Figure 4 depicts students’ responses regarding the types of instructional materials needed for ESP learning in the OHS sector. The research findings showed that 30% of students (9 OHS students) required a substantial amount of vocabulary related to safety procedures and instructions. The students opined that vocabulary could support their need for instructional materials focused on presentations and communication in an OHS context, with 50% of students (15 OHS students) expressing this need. These findings meant that OHS students prioritize field-specific vocabulary as the foundation for effective professional communication, particularly for presentations and workplace interactions. This highlighted a need where learners required specific linguistic resources to meet their target needs, as well as a shortfall related to their limited mastery of OHS terminology. From a pedagogical perspective, Basturkmen (2019) emphasized the need for explicit instruction on technical vocabulary within the context of academic disciplines to ensure relevance to professional use. Masoumpanah & Tahririan (2013) asserted that learners required materials aligning with workplace communication tasks. However, this study underlined that vocabulary development and communication practice must be integrated simultaneously, suggesting that effective ESP curriculum design should combine lexical instruction with authentic OHS communication tasks to enhance both accuracy and functional competence.

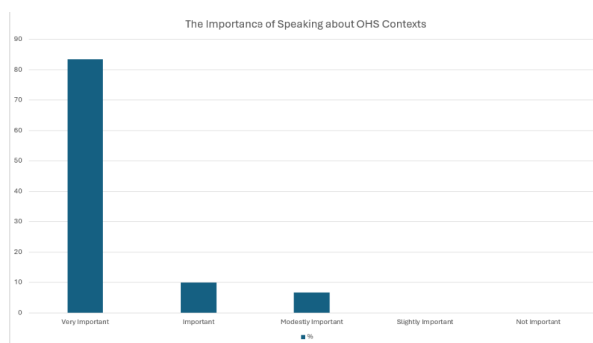


Figure 5. The Importance of Speaking in OHS Contexts

The importance of speaking skills in the OHS field was presented in Figure 5. The research results discovered that 83.37% of OHS students (25 students) considered learning English speaking skills to be very important, While, 10% of students (3 OHS students) considered it important. Only 6.67% of students (2 OHS students) considered it somewhat important. These findings aligned with previous student responses, indicating that English communication was crucial for interacting with colleagues and international stakeholders in the workplace. This perception was confirmed through an interview with student S5:

“My goal in learning English was to communicate fluently in English because in the future, when we work, we need to communicate with our boss, our partners, our staff, and our clients. Imagine that you could not talk to them. You could not work.” (S5/Int-8)

The findings pointed out that speaking was viewed as a core professional skill in the context of OHS, reflecting a strong alignment with workplace communication demands. This supported the notion that learners must prioritize the language functions required for real-world work tasks, particularly oral interactions. Similarly, Hyland (2022) highlighted that effective participation in professional discourse communities depended on the ability to communicate meaningfully within the context. Akkar & Idri (2021) confirmed that learners valued speaking but often lacked opportunities for authentic practice. Therefore, ESP instruction must focus on interactive, content-specific speaking tasks and a supportive environment to build fluency and confidence, ensuring that students can meet the demands of real-world workplace communication.

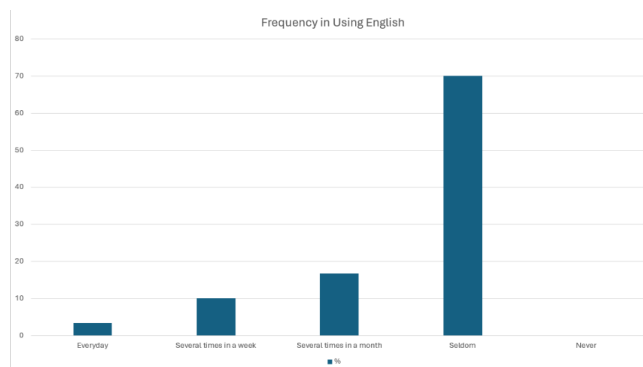


Figure 6. Frequency in Using English in OHS Contexts

In addition, Figure 6 illustrates how often students use English in contexts related to OHS. The results exposed that the majority of students (70% or 21 OHS students) rarely used English in OHS contexts. While, 16.67% of students (5 OHS students) reported using English several times a month. Meanwhile, 10% of students (3 OHS students) used English in OHS-related contexts several times a week. These findings were confirmed by the ESP lecturer in an interview:

“Most of students are passive in class. They tend to lack of practice because they only use English in class. I think it is because they are afraid to make a mistake when speaking. Then, they lack vocabulary related to OHS sectors. (T/Int-5)

The statement indicated that students had few opportunities to use English in class, which made them less active. Their exposure to the language remained limited because they primarily used it during classroom activities. Additionally, most students lacked the confidence to participate fully because they were worried about making mistakes when speaking. Their limited vocabulary in the field of OHS was another factor that made it difficult for them to discuss technical issues or express their thoughts. Consequently, these factors interact with one another, thereby limiting student engagement and speaking practice while learning English. These findings revealed a clear gap: although students valued English, they rarely used it in an OHS context due to limited vocabulary and a fear of making mistakes. This points to a deficiency concept where inadequate linguistic resources hinder learners' ability to perform targeted tasks. This was supported by Akkar & Idri (2021), who noted that when classroom instruction did not sufficiently encourage practical language use, ESP learners often struggled to perform communicative functions effectively. Additionally, Syaiful (2022) covered up that students in specialized fields in Indonesia were often highly motivated to learn English, yet their functional proficiency in the language was nevertheless restricted due to a lack of exposure to vocabulary and communicative practice related to their field. These results thus collaborated with the current conclusions that practical communication and domain-specific vocabulary acquisition should be prioritized in ESP education.

3. Learning Needs

Learning needs refer to the most effective ways for students to master the necessary language skills. In this category, respondents were asked three questions regarding their preferred learning activities, the importance of exercises and quizzes in the EOHS textbook, and the importance of real-life examples in the EOHS textbook.

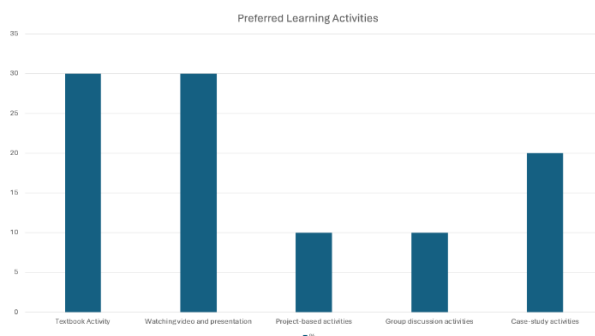


Figure 7. The Preferred Learning Activities

Figure 7 illustrates students' perceptions of their preferred learning activities when studying ESP in the field of OHS. The research findings indicated that 30% of respondents (9 OHS students) preferred text-based learning activities that utilized reading materials, books, and articles related to OHS topics. Similarly, 30% of respondents (9 OHS students) preferred learning through videos and presentations. These findings revealed that OHS students preferred a blended learning approach that combined text-based materials with multimedia resources. This highlighted their need for conceptual understanding (through reading) and conceptual visualization (through videos and presentations). From an ESP perspective, this aligned with the concept of learning needs, where instructional design must consider the strategies and types of input preferred by learners, as noted by Hyland (2022) that exposure to authentic disciplinary discourse, both written and oral, was crucial for developing professional competence. Pedagogically, this suggests that the ESP curriculum should integrate multimodal and authentic materials, such as safety manuals, reports, and video-based workplace simulations. It was consistent with Akkar & Idri (2021) as well as Haryati et al. (2020), who emphasized the importance of contextual and diverse learning resources in ESP. Therefore, effective ESP design should combine reading-based input with visual and interactive media to enhance comprehension, engagement, and application in OHS contexts.

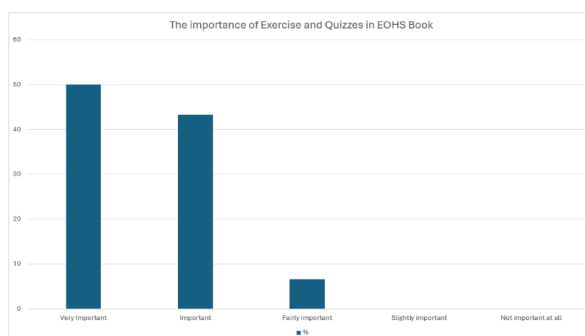


Figure 8. Students' Perception of Exercises and Quizzes in EOHS Book

Figure 8 describes students' perceptions of exercises and quizzes in the EOHS textbook in relation to previous findings regarding preferred learning activities in textbooks. The results showed that 50% of respondents (15 OHS students) considered it very important for the EOHS textbook to include exercises and quizzes while 43.33% of respondents (13 OHS students) considered it important. These findings indicated that students highly valued structured exercises and self-assessment, suggesting they required targeted support to develop ESP competencies in the OHS context. This aligned with the concept of learning needs, where learners required not only input but also opportunities to reinforce and monitor their progress. This also underlined the importance of integrating formative assessment into learning materials, as Basturkmen (2019) emphasized that ESP instruction must include mechanisms for continuous feedback to support skill development. Exercises and quizzes served as tools that helped learners to consolidate vocabulary and practice communication functions before applying them in real-world tasks. Therefore, ESP curriculum design must incorporate supported task-based exercises and self-assessment components to ensure that learners are able to gradually build confidence and competence in OHS-

related communication.

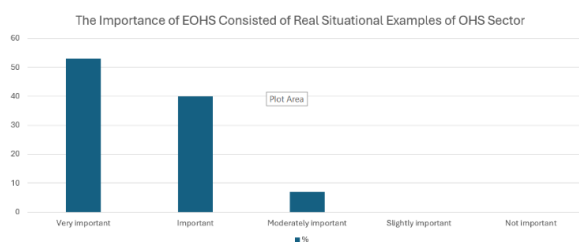


Figure 9. Students' Perception of Real Examples of OHS situations

In addition, Figure 9 shows students' perceptions regarding the inclusion of real-life OHS contexts in the upcoming EOHS textbook. The results indicated that 53.33% of respondents (16 OHS students) considered it very important for the upcoming EOHS textbook to present real-world examples of OHS contexts. While, 40% of respondents (12 OHS students) considered it important. These findings revealed that students strongly preferred contextual and authentic learning materials, emphasizing the importance of aligning ESP instruction with real-world workplace situations. This aligned with Long (2015), who stated that language learning became more effective when based on real-world tasks. Similarly, Akkar & Idri (2021) emphasized that materials which encourage real-world language use and reflect real-world professional tasks were necessary for effective ESP mastery. In the Indonesian context, research by Haryati et al. (2018; 2020) conveyed that students preferred contextual and field-related resources because they aided their understanding of workplace communication and professional terminology. Therefore, ESP curriculum design must incorporate authentic scenarios such as safety briefings, incident reports, and workplace communication tasks that allow students to transfer classroom learning into practical OHS applications.

4. Assessment Needs

Assessment needs refer to the types of assessments and feedback mechanisms used to measure students' language proficiency and learning progress.

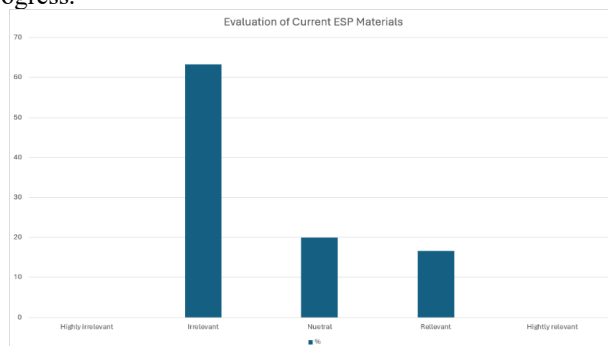


Figure 10. Students' Evaluation of Current OHS Materials

Figure 10 shows students' evaluations of the current OHS materials. The results indicated that 63.33% of respondents (19 OHS students) considered them irrelevant. Meanwhile, 20% of respondents (6 OHS students) considered them neutral. These findings revealed a clear mismatch between the existing materials and the needs of the target students, suggesting that current resources did not sufficiently reflect the communicative demands in the OHS field. This aligned with the concept of "deficit," where instructional content failed to bridge the gap between the current input received by learners and the professional performance required. From an ESP perspective, this suggested that the curriculum still relied on general English rather than field-specific content, which contradicted the views of Basturkmen (2019) and Hyland (2022), who emphasized that ESP instructional materials must be based on authentic professional discourse tasks. Therefore, ESP curriculum design must focus on developing English for Occupational Health and Safety (EOHS) textbooks that integrate contextual content, technical terminology, and real-world workplace communication tasks to ensure alignment between instructional materials and actual occupational health and safety (OHS) professional requirements.

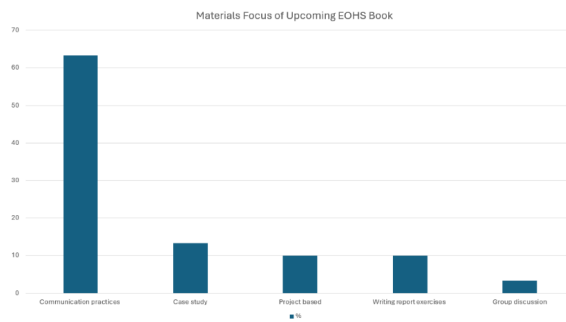


Figure 11. Content Material Focus of Upcoming EOHS book

Figure 11 describes students' perceptions of the content of the upcoming EOHS textbook. The research findings discovered that 63.33% of respondents (19 OHS students) expected that the upcoming EOHS textbook would focus more on practical communication (e.g., public speaking, discussions, or accident reporting). This finding implied that students prefer practical, communication-oriented content, indicating a strong orientation toward real-world workplace tasks rather than abstract linguistic knowledge. This supported Akkar & Idri (2021) and Haryati et al. (2020), who asserted that learners benefited from materials that simulate workplace communication. Therefore, ESP curriculum design should recommend that EOHS textbooks integrate authentic communication tasks, such as safety briefings, discussions, and incident reports.



Figure 12. Importance of International Standards & regulations

Moreover, Figure 12 depicts students' perceptions regarding the inclusion of international standards and regulations in the context of OHS in the upcoming EOHS textbook. The research results indicated that 56.67% of respondents (17 OHS students) considered it very important for the upcoming EOHS textbook to include international standards and regulations within the context of OHS. This suggested that OHS students expected ESP materials to integrate language learning with disciplinary knowledge, particularly international OHS standards. It was in line with Hyland (2022), who acknowledged that mastery of professional discourse involves understanding the norms, conventions, and regulatory frameworks of a discipline. Additionally, Haryati et al. (2020) emphasized the importance of contextualized and discipline-specific content. However, this study further highlighted the need to incorporate international standards and regulatory discourse, which have received relatively less emphasis. Consequently, ESP curriculum design must integrate global OHS regulations, terminology, and documentation practices to prepare students to communicate in international professional settings.

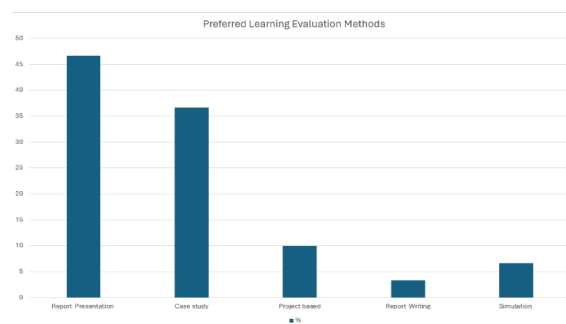


Figure 13. Preferred Learning Evaluation Methods

Figure 13 illustrates the preferred methods of learning assessment. The research results showed that 46.67% of respondents (14 OHS students) chose to present reports. While

36.67% of respondents (11 OHS students) preferred case studies. This finding indicated a clear preference for performance-based assessment, reflecting students' need to demonstrate language use in authentic professional tasks rather than through context-free tests. This supported Long (2015), who noted that task-based evaluation served as a means to assess learners' ability to use language in real-world situations. Similarly, Akkar & Idri (2021) emphasized that students in specialized fields prefer contextual and applied assessment. Therefore, ESP curriculum design must integrate authentic assessment methods, such as report presentations and case studies, to evaluate both language proficiency and professional communication skills within the OHS context.

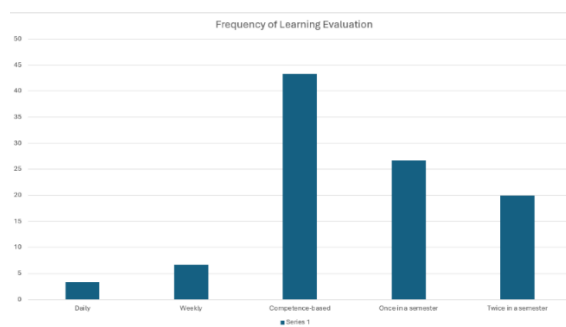


Figure 14. Preferred Learning Evaluation Frequency

Figure 14 refers to the frequency of preferred learning evaluations. The research results revealed that 43.33% of respondents (13 OHS students) believed that learning assessments should be based on targeted competencies, while 26.67% of students (8 OHS students) preferred assessments to be conducted once per semester. Meanwhile, 20% of students (6 OHS students) preferred learning assessments to be conducted twice per semester. These findings indicated that students preferred competency-based and continuous assessments over fixed, time-bound exams, suggesting a focus on the gradual mastery of skills aligned with learning outcomes. It was consistent with Basturkmen (2019), who argued that assessment should be integrated into the learning process to provide continuous feedback. Additionally, Haryati et al. (2020) emphasized the importance of contextual and process-oriented assessment. Therefore, the design of the ESP curriculum should adopt competency-based continuous assessment, where students are evaluated through phased assignments, such as presentations and case analyses, to ensure the gradual development of communication skills relevant to the OHS context.

CONCLUSION

This study identified the ESP learning needs of OHS students by collecting data from questionnaires and interviews. The findings highlighted three key points: a strong preference for communication-oriented teaching materials, the importance of OHS-related vocabulary to support speaking skills (particularly in discussions, presentations, and public speaking), and the inadequacy of current ESP materials, which remained too general and out of alignment with professional demands. These findings have implications for ESP instruction and instructional material development, where ESP teaching must prioritise contextual, task-based, and communication-oriented learning, supported by instructional materials such as an EOHS textbook that integrates technical vocabulary, real-world tasks, and international OHS standards. However, this study has limitations due to its small sample size and limited institutional context. Therefore, future research is recommended to involve a larger and more diverse group of participants and to examine the long-term impact of implementing ESP materials. Additionally, further research could investigate the effectiveness of developing ESP materials and expand needs analysis to other specialized fields to strengthen the development of the ESP curriculum.

REFERENCE

- Akkar, S., & Idri, N. (2021). A Diagnostic View on the Status of ESP at the Vocational Training Institute of Bejaia, Algeria The Case of Health, Safety and Environment Trainees. 155-136, (3)17. *المجلة الجزائرية للمخطوطات*, <https://asjp.cerist.dz/en/article/187524>
- Anthony, L. (2018). *Introducing English for Specific Purposes*. London: Routledge.
- Basturkmen, H. (2019). ESP teacher education needs. *Language Teaching*, 52(3), 318-330. doi:10.1017/S0261444817000398

Belcher, D. D. (2009). *English for Specific Purposes in Theory and Practice*. Ann Arbor: University of Michigan Press.

Brown, J. D. (2006). *Introducing Needs Analysis and English for Specific Purposes*. London: Routledge.

Haryati, S., Rochsantiningsih, D., & Susilohadi, G. (2018). *The English Needs of Occupational Safety and Health (OHS) Students at Tertiary Education Context: Students' Voices*. 262(Ictte), 422–428. <https://doi.org/10.2991/ictte-18.2018.79>

Haryati, S., Rochsantiningsih, D., & Wahyuni, D. S. (2020). English Needs of Occupational Safety and Health (OHS): The Multinational and National Companies' Voice in Indonesia. *Pedagogy: Journal of English Language Teaching*, 7(2), 117. <https://doi.org/10.32332/pedagogy.v7i2.1669>

Hyland, K. (2022). English for Specific Purposes: What is it and where is it taking us? *ESP Today-Journal of English for Specific Purposes at Tertiary Level*, 10(2), 202-220. <https://doi.org/10.18485/esptoday.2022.10.2.1>

Indriana, D., Nuraini, E. I., & Karmala, E. T. (2016). The Implementation of Schoology in Presentation Class. *Technology Enhanced Language Learning: Teaching and Researching* (pp. 35-39). Satya Wacana University Press. https://www.researchgate.net/publication/359054480_The_Implementation_of_Schoology_in_Presentation_Class

Long, M. (2015). *Second Language Acquisition and Task-Based Language Teaching*. Oxford: John Wiley & Sons, Inc.

Masoumpahan, Z., & Tahririan, M. H. (2013). Target situation needs analysis of hotel receptionists. *English for Specific Purposes World*, 40(14), 1-19. <http://www.esp-world.info>, Issue 40, vol. 14, 2013

Matisāne, L., Paegle, L., Akūlova, L., Eglīte, M., & Vanadžinš, I. (2022). Is It Essential for Occupational Health and Safety Experts to Know the English Language? Results From Several Studies in Latvia. *Frontiers in Public Health*, 10(March), 1–15. <https://doi.org/10.3389/fpubh.2022.833620>

Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis*. Thousand Oaks, CA: Sage

Nuraini, E. I., Nathania, M., & Afifah, N. (2024). Lexical Cohesion in Shereen Salama's Speech. *Wanastra: Jurnal Bahasa Dan Sastra*, 16(1), 39–45. <https://doi.org/10.31294/wanastra.v16i1.20226>

Rahmayani, Sani, A., & Selle, A. (2018). Evaluating the School Textbooks from the Perspective of Students. *Inspiring: English Education Journal*, 1(1), 28–45. <https://doi.org/10.35905/inspiring.v1i1.832>

Sugiyono, D. (2013). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta

Syaiful, A. (2022). Graduates' Necessities on English Education Curriculum of IAIN Parepare (A Need Analysis Study). *Inspiring: English Education Journal*, 5(1), 22–32. <https://doi.org/10.35905/inspiring.v5i1.2635>