

Investigating the Relevance of ESP Materials in Indonesian Vocational Schools: The Voice of Pharmacy Students

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Abstract

Previous English for Specific Purposes (ESP) studies have focused on examining relevant ELT learning materials within universities, with less attention given to vocational senior high schools. This study examined the relevance of ESP materials in an Indonesian vocational high school of pharmacy, as perceived by students. This narrative research in Central Java involved 30 twelfth-grade participants who shared their perspectives on genres, learning activities, and assessment through narrative frames and follow-up interviews. Thematic analysis revealed that many students found the ESP learning materials irrelevant to their specific needs within the pharmacy field. Discussions highlighted the students' desire for enhanced communicative competence to serve patients better, explain medicine usage, and comprehend medical prescriptions. The study suggests implementing communicative language teaching techniques to improve students' communicative competence and use of specialized vocabulary. Despite challenges with pronunciation and grammar, students demonstrated overall comprehension of the materials. In sum, this study offers valuable insights for curriculum designers and teachers in vocational senior high schools seeking to create more effective ESP learning materials.

Keywords: ELT materials, English for specific purpose, vocational high school, vocational students

INTRODUCTION

"'It's not the English I need." This statement from a pharmacy vocational student (Student 3, Interview, December) highlights a common problem: English language teaching (ELT) materials often fail to align with the specific needs of students in vocational settings. During her internship, Sari discovered that her coursework's grammar and general vocabulary focus left her unprepared for the specialized English used in pharmacies and hospitals. Classroom observations confirmed this mismatch, revealing widespread difficulty among students when encountering pharmacy-related technical terms.

Considering these cases, the importance of technical vocabulary for vocational students is evident. As supported by Smith et al. (2018), Gaffas (2019), and Hung (2022),

English for Specific Purposes (ESP) approaches are essential to equip students with relevant ELT materials. This focus on specialized English would enhance their comprehension of medical terminology, warnings, and procedures. In the healthcare field, a well-designed ESP course could further support students' careers by facilitating access to medical information in English (Oh et al., 2004), fostering strong communication with healthcare colleagues and patients across national and international contexts (Shin & Cho, 2014), and promoting professionalism in patient interactions (Bosher & Stocker, 2015; Lu, 2018).

While general ELT materials encompass all English skills (reading, writing, speaking, and listening), English for Specific Purposes (ESP) requires tailored materials to achieve academic or workplace goals. Critical elements of ESP materials include specialized registers or vocabulary (Coxhead, 2012; Kithulgoda & Mendis, 2020; Gardner & Davies, 2013), field-specific grammar (Paltridge, 2009), and communicative competence (Ho, 2020) and writing (Hyland, 2007). The application of these elements varies significantly by context (Lu, 2018; Choi, 2021; Outemzabet & Sarnou, 2023). For instance, healthcare fields use technical vocabulary related to patient care (Lu, 2016), while engineering involves lab reports and technical proposals. In pharmacy, ESP materials must cover ingredients, instructions, patient leaflets, clinical trial terminology, and academic texts (Montalt & González-Davies, 2014).

Extensive ESP research has examined discourse (Hyland & Jiang, 2021), genre (Marco, 2000; Hyon, 2018), and modality (Vihla, 1999) within medical, biomedical, nursing, and pharmaceutical fields. Studies such as those by Piroozan et al. (2016) demonstrate the value of English for Medical Purposes (EMP) in developing accurate reporting skills among nursing students. Similarly, Ho (2020) emphasizes communicative competence for tourism and hospitality students. However, more research is needed to explore students' perspectives on ELT materials, particularly within vocational senior high schools. At the same time, ESP studies exist in higher education and workplace contexts across Korea, Hong Kong, Arab nations, and Taiwan (Choi, 2021; Chan, 2019; Gaffas, 2019; Lu, 2018).

Indonesia's vocational programs begin at the senior high school level. With government-issued ELT materials designed for general usage, teachers must adapt resources for vocational students. This research aims to fill this gap by revealing the perspectives of vocational senior high school students on their ELT learning materials. Existing research needs to be more comprehensive in understanding student perspectives on ELT materials within vocational senior high schools, particularly in the Indonesian context. To address this gap, this study directly investigates student experiences. The central research question guiding this exploration is: "What did the students think about the implemented ELT curriculum, with a specific focus on the materials being taught?"

METHOD

This study employed a qualitative approach, specifically narrative inquiry, to explore student perspectives on the ELT learning materials within their textbooks. This method offered rich insights into students' experiences with these materials. Data collection strategies included narrative frames and interviews. Moreover, the research took place at a pharmacy vocational school in Indonesia, which prepares students for employment as pharmacy factory operators or pharmaceutical assistants in hospitals, clinics, and drugstores. Participants were twelfth-grade students selected based on classroom availability and prior experience with ELT materials, both in the classroom and during their internships. Pseudonyms were used throughout the study to protect participant identities and uphold research ethics.

This research utilized two data collection instruments: narrative frames and interviews. In written form, narrative frames captured students' detailed perspectives on the ELT learning materials within their textbooks. These frames employed questions designed to elicit rich stories about their experiences. Interview questions were similarly constructed to follow these narratives and deepen the inquiry. Both narrative frames and interview questions were synthesized from expert frameworks on effective ESP materials (Anthony, 2019; Belcher, 2009; Hyland, 2007; Paltridge, 2009; Tsou & Chen, 2014), focusing on genres (specialized vocabulary and targeted language instruction), practices relevant to the pharmacy field, and assessment.

The data collected from narrative frames and interviews were analyzed using Braun & Clarke's (2006) five-step thematic analysis process: familiarization, initial coding, identifying themes, reviewing themes, defining and naming themes, and report writing. Written narrative frame data were directly coded using descriptive words or short phrases. These codes were then grouped into themes based on indicators of effective ESP materials. For interview data, transcripts were created to facilitate analysis. The insights gained from these transcripts strengthened the overall analysis of student perspectives on ELT materials from the narrative frames.

FINDING AND DISCUSSION

The findings on student perspectives regarding the implemented ELT learning materials were organized into two sub-sections aligned with ESP frameworks: (1) student perspectives on genres and (2) student perspectives on learning activities and assessment. This structure ensures clarity and directly addresses the research question, providing meaningful and easily understood insights.

Students' Perspectives on the Genres a) Vocabularies of Specialist Registers

Student perspectives on the ELT materials revealed a fundamental tension. While some students, like Student 3 (Narrative Frame, August 18, 2023), found value in understanding general text structures, others emphasized the need for workplace-specific content. Moreover, student 5 (Interview, September 15, 2023) noted the disconnect between straightforward everyday texts and the specialized language of pharmacy. In addition, student 7 (Interview, September 18, 2023) explicitly called out the lack of materials like medication descriptions and prescription instructions. These findings collectively highlight a crucial gap: the current ELT materials need to sufficiently prepare vocational students for the specialized language demands of their chosen field. This suggests a strong need to incorporate industry-specific materials into the curriculum.

Narrative frames showed that the ELT materials primarily used descriptive, narrative, procedural, and report texts. While many students valued these genres for understanding real-world information and text structures, many found them difficult and irrelevant to their future in pharmacy. These students needed help with the vocabulary and the need for more connection to pharmacy-specific contexts. This highlights a crucial mismatch between the general ELT materials and the specialized language demands of the pharmacy profession.

Furthermore, Student narratives and interviews revealed several insights into vocabulary learning challenges and needs within their ELT classes. Student 4 described an activity focused on identifying and writing challenging words, promoting active vocabulary building. Student 1's examples illustrated the range of words encountered, from everyday terms to specialized ones like "temper," underscoring diverse linguistic demands. This aligns with Student 2's emphasis on the unique vocabulary needs of vocational programs like pharmacy, where specialized terminology is crucial for understanding medications and clinical concepts. Student 6's internship experience demonstrated the real-world consequences of language limitations; confusion over a drug interaction sheet highlights the risk of misinterpreting critical professional documents. These findings collectively support the need for tailored language instruction that provides general vocabulary skills and indepth support for industry-specific terms and documents. Since registers and vocabularies are integral components of texts, they play a significant role in shaping the quality of written materials (Cheng, 2018). Combining academic vocabularies with authentic materials has been a common practice among educators, as demonstrated by Jones & Durrant (2010) and Stoller (2016), who created meaningful materials for ESP classes.

In the context of vocational school classes, students also emphasized teaching vocabulary and registers. According to the findings from interviews and narrative frames, teachers prioritized enriching students' vocabulary mastery. Students reported being instructed to write down five vocabulary words related to the day's study materials or those they found challenging. While some students found vocabulary teaching beneficial for improving pronunciation, word usage, real-life application, and overall English skills, others expressed contrasting views, particularly those with an awareness of relevant vocabulary needs. They felt that the vocabulary taught in class needed to align with their practical needs, leading to confusion during internship experiences, such as understanding drug interactions. This divergence in perspectives was evident across the interviews and narrative frames.

This study's findings align with Flowerdew & Wan (2010), who highlight the everyday use of academic and professional workplace genres in language instruction. However, pharmacy students require materials relevant to their future profession; students in this study mainly encountered general literary texts. This mismatch highlights a fundamental problem: the texts (genres) used in class need to be more relevant to the students' pharmacy-specific needs. Instead, students should be exposed to professional genres used in pharmaceutical settings. As Marco (2000) emphasizes, understanding specialized registers (or vocabulary) is crucial since genres are built upon these linguistic features – a concept also echoed by Sinclair (1991). Mastery of pharmacy-related vocabulary would empower students to construct and communicate effectively within the workplace.

While prior research on pharmaceuticals often focuses on general medical terms, there's a need for a stronger emphasis on specialized vocabulary and lexical bundles. Grabowski (2015) proposes explicitly four essential types of pharmaceutical texts for instruction: patient information leaflets (PILs), summaries of product characteristics (SPCs), clinical trial protocols (CTPs), and selected pharmacology textbook chapters (ATs). This study's findings reveal a significant gap: students mainly encountered general English texts with limited pharmacy-specific vocabulary ("make," "cause," "effect"). This approach needs to prepare them fully for their field's specialized language. Instead, instruction should prioritize workplace-relevant registers like "take," "remember" (PILs), "hemoglobin,"

"insulin" (SPCs), "committee," and "subject" (CTPs). Additionally, medical prescriptions, signals, and drug interactions provide practical contexts rich in essential vocabulary for future pharmacists.

b) Language Instruction that Addresses Students' Specific Purposes

Students 9 and 10 raised concerns about the mismatch between their language instruction and the specialized needs of their pharmacy internships. Student 9 found the materials provided by the teacher too generic, failing to address pharmacy-specific language, which led to confusion. Moreover, the emphasis on sentence structure formulas did little to prepare the student for real-world pharmacy contexts. Student 10 noted that the language instruction needed the essential medical terminology required for the internship. This focus on general language skills left the student unprepared to navigate medical communication effectively. These findings highlight a critical gap: current language instruction needs to be improved by pharmacy students with the practical language tools required for successful internships.

While language instruction should include specialized phrases and sentences relevant to pharmacy, this differed from the students' experience. Previous research emphasizes utilizing phraseology and lexico-grammatical features to create field-specific language materials (Cheng, 2018; Paltridge, 2019). Moreover, Flowerdew (2016) illustrates how an ESP genre-based approach effectively guided grant proposal writing. However, student narratives and interviews in this study revealed a need for pharmacy-specific phrases or language instruction. Instead, students primarily recalled learning general greetings, basic sentences, and grammatical concepts (parts of speech, passive voice). This highlights a significant mismatch between the current ELT materials and the specialized language needs of pharmacy students.

The findings reveal a critical gap: students need more exposure to the specialized vocabulary and phrases essential for pharmacy communication. To address this, a communicative framework focused on pharmacy practice is recommended. Hymes (1971, 1972) emphasizes that communication extends beyond grammar and vocabulary, encompassing cultural context and the nuances of real-world situations. Building upon this, scholars like Bachman (1990) and Canale & Swain (1980) have developed comprehensive models of communicative competence, including grammatical, discourse, sociolinguistic, strategic, interactional, and formulaic competence. By integrating these communicative components with pharmacy-specific content, language instruction can effectively prepare students for the demands of their future profession. For example, students can learn writing conventions within different pharmacy settings while mastering relevant vocabulary and phrases. This approach would empower them to produce effective, appropriate communication within the pharmacy field.

Perspectives on the Learning Activities and Assessment

a) Practices of Particular Social or Professional Groups

This section explores students' perspectives on whether classroom activities reflect real-world practices relevant to pharmacy. Given the vocational nature of the school, this focus on authentic practice is crucial. Research supports integrating real-world tasks to enhance ESP students' communicative skills and prepare them for workplace demands (Erazo et al., 2019; Kuosuwan, 2016; Prachanant, 2012; Alomoush & Al-Na'imat, 2018).

Furthermore, student feedback revealed concerns about the structure and focus of their language instruction. Student 8 observed disorganization, with the teacher mainly using random text reading, vocabulary memorization, and writing tasks without a clear connection to pharmacy practice. This lack of structured, focused instruction could make it difficult for students to apply their skills in real-world situations.

Similarly, Student 11 noted the emphasis on pronunciation and essential dialogue, which may overshadow the need for pharmacy-specific content. Student 13 expressed a desire for teaching relevant to pharmacy practice, feeling that the current general materials were insufficient for future workplace needs. Contrasting these views, Student 12 made a strong case for targeted practice, emphasizing phrases specific to the pharmacy profession. This highlights a fundamental tension: some students desire to focus on foundational language skills, while others demand direct preparation for the specialized language demands of their future careers.

Students identified practices related to writing, reading, and speaking skills. The writing activity focused on vocabulary, with students recording unfamiliar words from the lesson. Reading activities involved the teacher providing feedback on pronunciation while speaking practice centred on greetings, asking questions, and seeking permission. These activities were mandated by the teacher and included in a class agreement. Significantly, no specific listening activities were clearly described. This suggests listening skills may have received less emphasis in the classroom. Most students found the learning activities easy to understand but lacked a clear focus on pharmacy-related content. While they appreciated the opportunity to practice pronunciation, the topics primarily centred on general English rather than specialized pharmacy contexts.

Students acknowledged the value of pronunciation and fluency for everyday communication but felt the materials needed to be narrower to prepare them adequately for future work. Despite some positive responses about developing basic English skills, others expressed frustration. They cited a need for more relevant pharmacy practice, unclear focus on the ELT materials, and decreasing motivation to learn English. Furthermore, findings highlight the need for communicative activities tailored to the pharmacy profession. A solution lies in combining English for Specific Purposes (ESP) with Communicative Language Teaching (CLT), an approach supported by Richards (2006). CLT's emphasis on learner-centred, context-rich activities can boost students' communicative skills within the specialized pharmacy field.

b) Assessment

As Brown (2014) stated, language teaching assessment mainly incorporates formative and summative evaluations of traditional English skills, nonverbal interaction, and communicative competence. However, student feedback primarily focused on conventional skill assessments. Students described a variety of summative assessments, including daily quizzes, midterms, finals, homework, and assignments. Formative assessments included class participation, attendance, and observation. The teacher encouraged participation by asking students to answer questions on the board and provided individual feedback through in-class observations. Students appreciated this personal feedback and expressed positive views on the assessment process.

Student feedback shed light on their English courses' assessment methods and overall classroom experience. Student 15 described various evaluation techniques: chapter-based

test reviews, encouragement of participation, homework assignments, and direct questioning. These aim to measure both understanding and active engagement. Student 14 echoed the importance of participation and attendance as factors in assessment. Additionally, Student 16 observed the teacher's hands-on management style, closely monitoring students during tasks. While the teacher supported in-class difficulties, less help was offered during test reviews. These observations highlight the multifaceted nature of assessment in this classroom. The teacher uses a combination of tools to foster student engagement, monitor comprehension, and support learning. However, there may be room for improvement in offering guidance during test reviews.

Student feedback and research findings highlight the crucial need for assessments that directly measure pharmacy-specific speaking and listening skills within the vocational high school setting. The Occupational English Test (OET), as Douglas (2000) described, provides an excellent framework for this purpose. This test utilizes realistic role-plays where students interact with an expert interlocutor, simulating pharmacist-patient encounters. To ensure a comprehensive evaluation, assessment criteria should be derived from established models of communicative competence (Bachman, 1990; Canale & Swain, 1980; Celce-Murcia et al., 1995; Hymes, 1971, 1972). This would include grammatical accuracy, clear and logical communication, appropriate language use within the pharmacy context, the ability to manage communication challenges, effective conversational skills, and mastery of specialized pharmacy vocabulary. Utilizing a detailed rating scale would provide students with valuable feedback on their proficiency levels and specific areas for growth.

CONCLUSION

This study's findings reveal a significant disconnect between current ELT materials and the specialized needs of pharmacy students. While students found some of the materials clear and understandable, they consistently expressed dissatisfaction across critical areas. These included irrelevant vocabulary and text genres, a lack of focus on pharmacy-specific language and communication, activities that needed more workplace relevance, and assessments that needed to be more general for their vocational path. These findings have important implications, such that the curriculum should prioritize developing or adapting ELT materials that directly align with vocational pharmacy students' needs, contexts, and future careers. Teachers can use this study to guide the selection and adaptation of materials, ensuring they are accessible to students and focused on pharmacy-specific language development. Further research is warranted, particularly quantitative studies utilizing cross-sectional, longitudinal, or research and development designs. Such investigations could enrich our understanding of ESP and provide much-needed guidance for tailored material development in pharmacy.

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