

# Addressing ESP Needs in Vocational Schools Based on Manufacturing and Healthcare Industry Demands in Gresik

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## ABSTRACT

This study explores the alignment of English for Specific Purposes (ESP) instruction in vocational high schools (SMK) with the communication demands of the manufacturing and healthcare industries in Gresik Regency, Indonesia. Employing a qualitative case study approach, data were collected through interviews with teachers, students, and industry representatives, classroom observations, and document analysis. Findings reveal that students in pharmacy and technical departments require specific English skills such as reading technical manuals and medical charts, writing reports, and engaging in professional oral communication. However, the current curriculum still emphasizes General English, resulting in a gap between school preparation and workplace needs. Teachers face challenges including limited ESP-specific materials, lack of training, and constrained class time. Meanwhile, industry stakeholders emphasize the importance of technical vocabulary and oral communication skills. The study underscores the urgency of curriculum redesign, the development of specialized ESP modules, and stronger collaborations between schools and industries to improve students' work readiness.

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## 1. INTRODUCTION

In the era of globalization and Industry 4.0, mastery of English as a means of communication and documentation has become indispensable, particularly for graduates of vocational high schools (SMK). The implementation of English language instruction in Indonesian vocational schools (SMK) has traditionally relied on General English (GE) syllabi, which are more suited for academic and everyday contexts rather than the specialized demands of the workplace. Despite national revitalization efforts to enhance vocational education through policy initiatives like the Presidential Instruction No. 9/2016, there remains a substantial gap between curriculum design and the actual language needs of students entering career-specific fields.

Fadlia et al., (2020) highlight that the current English syllabus in vocational schools is inherited from general secondary education and fails to reflect the specific linguistic requirements of vocational competencies such as maritime engineering, hospitality, or business administration. As a result, many schools continue to teach General English, although some have tried to introduce ESP-based subjects such as English for Maritime, albeit inconsistently.

Teachers report challenges such as lack of ESP-specific teaching materials, minimal professional training in ESP, and student difficulties due to low English proficiency and unfamiliarity with the language. Yet, student feedback gathered in focus group discussions indicates a clear desire for English tailored to their future careers, reinforcing the relevance and urgency of integrating ESP principles into vocational education. This is especially relevant in regions like Gresik Regency, which is known as one of East Java's industrial and healthcare hubs. English for Specific Purposes (ESP) has emerged as a specialized branch of English language education aimed at addressing the specific linguistic needs of students in their respective fields of study and future professions. Given the technical and professional demands of the manufacturing and healthcare sectors in Gresik, the integration of ESP into the curriculum of vocational schools becomes imperative. Thus, this research aims to explore the alignment between the current ESP curriculum in SMKs and the real-world communication skills required in these two dominant industries in Gresik.

In Indonesia, the Merdeka Curriculum supports flexible and student-centered learning. It encourages teachers to act as motivators and facilitators so that students become more independent and enthusiastic learners (Amanulloh & Wasila, 2024). However, because there's not much time for face-to-face classes, teachers must find creative ways to teach ESP. Although some ESP books exist for majors like marketing and engineering, there are still no specific modules for Vocational school student particularly in the Gresik Regency.

Experts like Hutchinson and Waters (1987) explain that ESP is based on students' reasons for learning English. According to (Jubhari, 2022), ESP must: (1) meet learners' specific needs, (2) follow methods related to their field, and (3) focus on the appropriate language and skills. These ideas are important in creating courses for students in specific majors, such as business or engineering (Yong, 2014). Finally, a good ESP course should prepare students for real communication in real jobs. Teachers and textbook writers need to understand what students will actually need in the workplace. Since speaking is one of the most needed skills in today's job market, the demand for ESP—especially in speaking practice—is growing around the world (Fadlia et al., 2020) Therefore, ESP materials must match the real-world needs of students and what the labor market expects from them.

## **2. LITERATURE REVIEW**

### **2.1 Teaching and Learning at Vocational Schools**

Teaching in vocational schools significantly differs from teaching in senior high schools. The primary distinction lies in the instructional materials, which in vocational schools are more specialized and tailored to specific fields compared to the broader, more general content taught in high schools. Additionally, differences can be found in the duration and the structure of the curriculum. While high schools tend to emphasize general knowledge, vocational schools require students not only to master theoretical concepts but also to develop strong practical skills and the ability to apply their knowledge effectively.

## 2.2 The Merdeka Curriculum

Curriculum changes in Indonesia began in 1947, 1952, 1964, 1968, 1975, 1984, 2004, 2006, 2013 to 2022 until now (Amanulloh & Wasila, 2024) According to the decree of the Minister of Education, Culture, Research, and Technology (Mendikbudristek) of the Republic of Indonesia, number 56 of 2022, regarding Guidelines for Implementing the Curriculum in the Order of Recovery Learning, this curriculum was designed to overcome the learning loss and learning gap that occurred during the COVID-19 pandemic. It is supported with research from (Jubhari, 2022) Prior to its official adoption and implementation in the 2022/2023 academic year, the Merdeka Curriculum underwent three stages of development. In the 2020/2021 school year, the Ministry of Education, Culture, Research, and Technology (Mendikbudristek) of the Republic of Indonesia, through decree number 719/P/2020, introduced the Emergency Curriculum as a response to the special circumstances caused by the COVID-19 pandemic. This was later developed into a Prototype Curriculum, which was trialed in 2,500 schools across Indonesia. Subsequently, the Prototype Curriculum was renamed the Merdeka Curriculum and officially implemented starting from the 2022/2023 academic year, as stated in Mendikbudristek regulation number 56/2022.

Based on the National Education Standards Agency (BSNP), the Merdeka Curriculum is designed to offer varied intra-curricular learning, with content optimized to allow students sufficient time to explore concepts in depth and strengthen their competencies. In its implementation, teachers are granted flexibility to utilize a range of teaching tools, enabling them to tailor learning to students' needs and interests.

The Merdeka Curriculum was officially introduced by the Minister of Education, Culture, Research, and Technology, Nadiem Makarim, as part of the evaluation and refinement of the 2013 Curriculum. Initially known as the Prototype Curriculum, this initiative represents the government's effort to prepare a future generation that is more competent and capable across various fields. The Merdeka Curriculum supports flexible and student-centered learning. It encourages teachers to act as motivators and facilitators so that students become more independent and enthusiastic learners ((Sunggoro et al., n.d.)). However, because there's not much time for face-to-face classes, teachers must find creative ways to teach ESP. Although some ESP books exist for majors like marketing and engineering, there are still no specific modules for Vocational school students, particularly in the Gresik Regency.

## 2.3 English Curriculum at Vocational Schools

Jubhari (2022) states that English learning and teaching are classified as adaptive subjects with two primary objectives. The first objective is to enable students to attain a certain level of English proficiency that supports the enhancement of their professional capabilities. The second objective is to equip students with the necessary English competencies and skills so that they can effectively apply them, whether in pursuing careers related to their field or in continuing their studies to a higher level within the same discipline. Yet, the materials provided by this curriculum for vocational school are still too general and similar to those taught in senior high schools. there are no subject-related English materials specifically intended for the students of vocational schools because English at high school levels is still in the scope of English for general purposes.

## 2.4 English for Specific Purposes

English for Specific Purposes refers to teaching English to acquire clear language skills in real-world contexts, to prepare students to use English in their future careers, or to understand English discourse related to their areas of expertise. According to (*4-An Introduction to ESP LAMRI*, n.d.),

the purpose of ESP is to help language learners develop the skills needed to use their language skills in a particular work, profession, or business area. It is believed that the emphasis in any ESP teaching setting should be on the demands of the students and what they must perform in the target circumstance.

According to Collins English Dictionary (2016: 239), English for Specific Purposes (ESP) refers to the theory and practice of learning and teaching English tailored for specific fields, such as science, nursing, tourism, and others. Drawing from these definitions, ESP can be understood as English instructional materials used in the teaching and learning process with the objective of enhancing students' competence in particular subject areas or professional contexts.

Tunik Muharlisiani et al. (n.d.) state that ESP is a branch of English Language Teaching (ELT) often referred to as 'applied ELT' since the goals and content of an ESP course are determined by the specific needs of its learners. In contrast, English for General Purposes (EGP) — or General English — focuses on meeting students' general language needs. Although needs analysis is fundamental in designing and developing materials for both ESP and EGP, the approaches differ. ESP emphasizes the learners' specific and immediate needs related to particular contexts, whereas EGP materials tend to be more general, as learners at that stage may not yet have clearly defined contexts for language use.

## **2.5 ESP Needs in the Manufacturing Sector in Gresik**

Gresik is known as an industrial hub, hosting major industrial zones such as the Gresik Industrial Estate and numerous multinational companies. In this sector, workers are expected to comprehend English-language documents such as Standard Operating Procedures (SOPs), work manuals, inspection reports, and engage in communication with foreign clients or supervisors. (Hadi et al., 2023) emphasize that English instruction in vocational schools should concentrate on technical vocabulary and formal communication. (Sunggoro et al., n.d.) further suggests that simulation-based training involving communication scenarios within industrial settings significantly enhances students' work-readiness. For this, learning English for specific purposes, particularly aimed at manufacturing industry-related job, is a need.

## **2.6 ESP Needs in the Healthcare and Hospital Sector**

Gresik Regency is one of the regions in East Java experiencing significant growth in healthcare services. According to the most recent data published by the Gresik District Health Office in 2024, the region currently operates 10 hospitals and over 120 clinics distributed across its sub-districts. These facilities include type B and C hospitals, primary clinics (*klinik pratama*), and specialty clinics (*klinik utama*), offering services such as dental care, maternal and child health, and occupational health. (Dinas Kesehatan Kabupaten Gresik. 2024).

The increasing number and diversity of healthcare facilities illustrate not only the quantitative expansion of this sector but also the growing demand for well-prepared healthcare personnel. In particular, staff are now expected to possess adequate English communication skills, especially for interacting with foreign patients or interpreting medical documents written in English.

This reality underscores the importance of implementing *English for Specific Purposes* (ESP) programs at vocational high schools, especially in the healthcare strand. Students need to be trained in using English effectively in clinical settings, enabling them to meet workplace communication standards upon graduation. Hingmane et al. (2024) highlight that nursing students often face difficulties in understanding English medical texts. Zuliyanti (2017) recommends the

development of learning modules focused on doctor-patient communication, medical interviews, and mastery of medical terminology. These findings underscore the urgent need for ESP materials that are tailored to the real-world linguistic demands of the local medical environment.

### **3. METHOD**

This study employed a qualitative case study design to explore the alignment between English for Specific Purposes (ESP) instruction in vocational high schools and the communication needs of the manufacturing and healthcare industries in Gresik Regency. A qualitative approach was considered appropriate because the study aimed to obtain an in-depth understanding of participants' experiences, perceptions, and expectations regarding ESP implementation. The case study design enabled the researchers to investigate the phenomenon within its real-life educational and industrial contexts. The study focused on selected vocational schools that offer pharmacy and technical programs, which are closely related to the dominant industries in the region.

The participants were selected using purposive sampling to ensure that they could provide relevant information related to the research objectives. They consisted of English teachers, vice principals responsible for curriculum affairs, students from pharmacy and technical departments, and representatives from manufacturing and healthcare industries. These participants were chosen because they were directly involved in the teaching, learning, and application of English in vocational and workplace settings. Their diverse perspectives provided comprehensive insights into the existing ESP practices and industry expectations.

Data were collected through semi-structured interviews, classroom observations, and document analysis. Semi-structured interviews were conducted with teachers, school administrators, students, and industry representatives to explore their views on English language needs, challenges in ESP implementation, and workplace communication requirements. Classroom observations were carried out to examine teaching practices, student participation, and the relevance of instructional materials to vocational contexts. In addition, curriculum documents, syllabi, lesson plans, and teaching modules were analyzed to identify the extent to which ESP principles had been incorporated into the existing English curriculum.

The collected data were analyzed using thematic analysis. The researchers first transcribed and organized the interview and observation data, followed by repeated reading to gain familiarity with the information. Relevant codes were then generated and grouped into broader themes related to students' language needs, curriculum gaps, instructional challenges, and industry expectations. To enhance the trustworthiness of the findings, data triangulation was conducted by comparing information obtained from interviews, observations, and document analysis. This process helped ensure the credibility and consistency of the study results.

### **4. RESULTS AND DISCUSSION**

#### **4.1 Students' ESP Needs**

The study reveals that students in pharmacy and technical departments require specific English skills tailored to their professional contexts. In the pharmacy department, students need to understand medical charts, read prescriptions in English, write simple nursing or pharmacy reports, and communicate effectively with foreign patients or suppliers. Meanwhile, in the technical (manufacturing) department, students require proficiency in reading machine manuals, safety instructions, Standard Operating Procedures (SOPs), and communicating technical problems clearly

to supervisors or foreign engineers. During interviews, students expressed a desire to improve speaking skills because they perceive speaking as the most crucial skill in real workplace situations. This aligns with Dudley-Evans and St John (1998), who emphasize that ESP must meet the specific communicative needs of learners in target situations.

#### 4.2 Challenges Faced by Teachers and Students

Teachers reported several significant barriers in implementing ESP:

- Limited availability of specific ESP teaching materials tailored to pharmacy and manufacturing contexts.
- Lack of professional development and training programs focused on ESP methodology.
- Time constraints in the curriculum, making it difficult to integrate ESP activities fully. Students, on the other hand, struggle with:
  - Limited vocabulary, especially technical terms related to their fields.
  - Low motivation due to difficulties in understanding the material and seeing its immediate relevance.

The analysis of lesson plans and syllabi revealed that English subjects are still designed for General English purposes. This misalignment creates a gap between school learning outcomes and workplace demands.

#### 4.3 Expectations from Industry Representatives

Industry stakeholders emphasized the importance of oral communication, particularly in service interactions and workplace presentations. In the manufacturing sector, the ability to discuss production issues, safety concerns, and machine maintenance procedures in English is considered crucial. In the healthcare sector, clear English communication is necessary for explaining medical procedures to patients and writing accurate medical records. Both sectors require mastery of technical vocabulary and the ability to produce concise and clear written reports. This supports the Target Situation Analysis (TSA) perspective, which focuses on the future tasks learners need to perform (Munby, 1978).

#### 4.4 Innovations in Teaching Practices

Some teachers have started to adopt simulation-based activities, such as role-plays where students act as pharmacists explaining medications or as technicians discussing equipment issues. Information-gap activities and group discussions have also been used to encourage student participation and improve fluency.

However, the implementation of these innovative methods is still at an early stage and faces challenges such as a lack of proper ESP modules, limited class time, and inadequate supporting resources. As a result, students' exposure to real-life language use remains limited.

Aspect	Findings
Students' Needs	Reading technical/medical documents, writing reports, speaking in professional contexts.
Challenges	Limited materials, inadequate teacher training, low student motivation, curriculum time constraints.
Curriculum Gap	Curriculum still focuses on General English and lacks context-specific ESP components.

Industry Demand	Emphasis on speaking skills, technical vocabulary mastery, and clear written documentation.
Innovations	Use of role-play, simulations, and discussions, though implementation is still limited.

The study confirms (Fadlia et al., 2020) argument that ESP courses should be developed based on a thorough needs analysis to meet learners' specific goals. The current state of ESP in Gresik vocational schools highlights a pressing need for curriculum redesign and the development of specialized modules. Teachers require more training and institutional support to design and implement effective ESP lessons. Collaboration between schools and industries can help provide authentic materials and ensure that teaching practices are aligned with workplace expectations. Overall, a shift toward needs-based ESP instruction will not only enhance students' English proficiency but also improve their readiness for professional communication in manufacturing and healthcare sectors.

## 5. CONCLUSION

Based on the findings, it can be concluded that there is a significant misalignment between the current English curriculum in vocational schools and the real-world communication needs of the manufacturing and healthcare industries in Gresik. Students require targeted ESP instruction focusing on technical vocabulary, speaking, and writing relevant to their professional fields. However, the existing curriculum remains oriented toward General English, limiting students' preparedness for industry-specific tasks. Teachers face substantial challenges, such as a lack of specialized materials and insufficient training, while industries express a strong demand for graduates equipped with practical English skills. Therefore, there is an urgent need to redesign the curriculum, develop context-specific ESP modules, and foster stronger cooperation between vocational schools and industry stakeholders to ensure that graduates possess the language competencies required in the workplace.

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