

Improving Pharmacy Vocational High School Students' English Proficiency Through an ESP Enrichment Program

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Abstract

In response to the gap between English language learning and the needs of pharmacy vocational high school students, a *vocational pharmacy high school in West Java conducted an English for Specific Purposes (ESP) Enrichment Program outside regular class hours*. Therefore, this study aims to analyze how the Vocational Pharmacy High School's enrichment program improved students' English language proficiency. This study adopted a qualitative study approach, particularly an exploratory case study. Data were collected through classroom observation, document analysis, and interviews involving 6 participants and analyzed by using thematic analysis. The findings of this study revealed that the program helped students learn and practice pronunciation, vocabulary, and speaking. In addition, the program provided reading and writing activities, such as role-plays, vocabulary tasks, and short assessments. Although the program yielded positive results, it still requires improvement, particularly in developing a clear syllabus and long-term plan. Overall, the ESP enrichment program helped support students' English language learning.

Keywords: English for Specific Purposes (ESP), English for Pharmacy, ESP Enrichment Program

Abstrak

Menanggapi adanya ketimpangan antara pembelajaran bahasa Inggris dan kebutuhan siswa di sekolah menengah kejuruan farmasi, satu sekolah menengah kejurusan farmasi di Jawa Barat melaksanakan Program Pengayaan Bahasa Inggris untuk Tujuan Khusus (ESP) di luar jam pembelajaran reguler. Oleh karena itu, penelitian ini bertujuan untuk menganalisis bagaimana Program Pengayaan di sekolah menengah kejuruan tersebut meningkatkan kemampuan bahasa Inggris siswa. Penelitian ini menggunakan pendekatan kualitatif, tepatnya yaitu studi kasus eksploratif. Data dikumpulkan melalui observasi kelas, analisis dokumen, dan wawancara dengan 6 peserta, kemudian dianalisis menggunakan analisis tematik. Temuan dari penelitian ini menunjukkan bahwa Program Pengayaan tersebut membantu siswa belajar dan berlatih pengucapan, kosakata, dan berbicara. Selain itu, program tersebut menyelenggarakan aktivitas membaca dan menulis, bermain peran, tugas kosakata, dan latihan singkat. Meskipun program ini menghasilkan hasil positif, program ini masih memerlukan perbaikan, terutama dalam mengembangkan silabus dan rencana jangka panjang program yang jelas. Secara keseluruhan, program pengayaan ESP membantu mendukung pembelajaran bahasa Inggris siswa.

Kata Kunci: Bahasa Inggris untuk Tujuan Khusus (ESP), Bahasa Inggris untuk Farmasi, Program Pengayaan ESP



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INTRODUCTION

In Indonesia, vocational high schools are part of the secondary education system. Vocational high schools in Indonesia prepare students to enter the world of work. The curriculum for vocational high school focuses on practical skills that are related to students' future careers. For this reason, vocational high schools should offer students skills that can be applied in their field of work (Kamarrudin et al., 2021; Rahmadhani, 2022; Rosida & Sujannah, 2023; Sari & Wirza, 2021). As a global language, English is considered an essential skill for vocational students. Laili and Nashir (2023) stated that English is widely used in academic and professional communication. Because of this, learning English becomes an important asset for vocational students as they face future challenges.

For pharmacy students, English instruction should be more targeted, as they need to understand pharmaceutical terminology and professional communication in the pharmacy context. However, English learning in vocational pharmacy schools still faces challenges. Many students still have low proficiency (Laili & Nashir, 2023; Solihati & Rahayu, 2020; Suwandi & Wafa, 2020). Textbooks and materials provided by the government are general English and do not focus on pharmacy topics (Amelia, 2019; Syakur et al., 2020). A specific English syllabus for pharmacy is also not yet available in many schools (Solihati & Rahayu, 2020). These conditions make English learning less effective for pharmacy students.

English for Specific Purposes (ESP) becomes one of the suitable approaches because it focuses on learners' needs and the language used in their future academic or professional environment who are required to meet the essential, specific, and precise needs to respond to the considerable demands in vocational or academic situations in English (Chang, 2009; Tsao, 2011 as cited in Zahedpisheh et al., 2017). ESP is an approach to language teaching where content and methods rely heavily on learners' needs and interests, which is required for academic or professional purposes (Hutchinson & Waters, 1987; Hossain, 2013; Byram & Hu, 2017; Asrifan et al., 2020; Fadlia et al., 2020; Ibrahim, 2020; Solihati & Rahayu, 2020; Thepseenu, 2020). It is specialized English, not General English. As stated by Rahman (2015), ESP focuses on learning and teaching situations in which teaching methods and learning environments differ from those in General English.

In the pharmacy context, several disciplines of knowledge exist, including pharmaceutics, pharmacology, and pharmacognosy. Furthermore, according to Scahill et al. (2017), pharmacy knowledge can be broadly divided into four areas: 1) pharmaceutics and pharmacokinetics, 2) pharmaceutical chemistry, 3) pharmacology, and 4) pharmacy practice, which includes clinical pharmacy, pharmacotherapy, social and administrative sciences, and pharmaceutical care. This knowledge is important for future pharmacists to learn. As stated by Waterfield (2010), pharmaceutical knowledge is a unique key attribute of the pharmacy profession. From the disciplinary knowledge that pharmacy students are expected to master, English is becoming increasingly crucial, as many medical terms are written in English. Whereas, a study conducted in Saudi Arabia on medical students by Gaffas (2019) indicated that students still have difficulties understanding technical vocabulary in the medical context; Ghaffas recommended that the design of English courses for medical students should be more specific to improve students' English skills and meet their needs in understanding technical vocabulary in the medical context. Moreover, the study by Amelia (2019) found that the 2013 English textbooks provided by the Indonesian government for pharmacy students did not meet their needs, as they focused primarily on general English learning.

A pharmacy-focused Vocational High School located in West Java, Indonesia, initiated an ESP enrichment program to meet the needs of its students, as classroom English learning could not adequately address those needs. The ESP enrichment

program, initiated at a pharmacy-focused Vocational High School in West Java, is conducted outside the classroom. Helms et al. (2021) defined learning outside the classroom as educational programs that occur outside school time. Learning outside the classroom is an educational experience that takes place during regular class hours. Helms et al. (2021) defined out-of-school-time programs as educational programs that occur outside school hours. Enrichment programs are part of learning outside the classroom. Enrichment programs stem from students' needs that are not being met in the classroom. As cited from Hodges et al. (2017), Woodland (2008) classified enrichment programs into three groups: extracurricular activities (e.g., sports, arts, or academic assistance), mentoring programs, and rites-of-passage or culturally based programs.

Previous studies have reported ESP in Pharmacy (Amelia, 2019; Basri et al., 2020; Botirovich et al., 2023; Jubhari et al., 2022; Khan, 2017; Laili & Nashir, 2023; Sojoodizadeh et al., 2020; Solihati & Rahayu, 2020; Suwandi & Wafa, 2020; Syakur et al., 2020; Woźniak & Arada, 2018). These studies typically reported on needs analyses or the development of materials for pharmacy students. However, there are still limited studies investigating Vocational High Schools that have initiated enrichment programs for students who need to learn specific English. An enrichment program could be helpful for pharmacy students, particularly as a way to begin meeting their needs.

The school initiated this program because there is no specific English curriculum provided for Vocational Pharmacy Students. This study aims to fill the gap by analyzing how the Vocational Pharmacy School's enrichment program enhances students' English language proficiency. Specifically, this study aimed to answer these three research questions:

1. How does the enrichment program help improve the English language proficiency of pharmacy students?
2. How does the principal's leadership role ensure the implementation of the ESP enrichment program?
3. How are the Students' and Teachers' reflections regarding the implementation of the ESP enrichment program?

METHOD

Research Design

This study employed a qualitative case study approach, which provides an in-depth understanding of a "case" or bounded system by requiring comprehension of an event, activity, process, or one or more participants (Creswell, 2002). Furthermore, Yin (2003) defined a case study as an empirical investigation that explores a contemporary phenomenon within its real-life environment, particularly when the boundaries between the phenomenon and its context are unclear. More specifically, this research employed an exploratory case study. Yin also defined an exploratory case study as a means to define the necessary questions and hypotheses for developing subsequent studies. Because the school's enrichment program was relatively new and unstructured, and given the limited research on this topic, an exploratory case study was deemed the most appropriate approach.

The ESP Enrichment Program

The ESP enrichment program, conducted at a pharmacy-focused Vocational High School in West Java, was held after class as an additional English class that discussed the context of English for pharmacy, which is not covered in the regular classroom. The enrichment program comprised four sessions, each consisting of two approximately 20-minute meetings. The material in the ESP enrichment program is trying to fulfill the needs of pharmacy students for their future work field, where they will work in the pharmaceutical industry, pharmacies, health centers, and clinics where in

these jobs, they need English language skills to communicate with foreign customers, read ingredients for drug formulation, read prescriptions, and write lab reports in English.

Table 1. ESP Enrichment Program

Session	Time	Detail
Session 1	24 minutes	<ul style="list-style-type: none"> Introduction to English for a pharmacy, Pharmaceutical English vocabulary and phrases, Pronounce the pharmacy vocabulary.
Session 2	22 minutes	<ul style="list-style-type: none"> Role-play (practicing serving customers and using the evaluation vocabulary and phrases they had already learned.
Session 3	22 minutes	<ul style="list-style-type: none"> Students learned more pharmaceutical English vocabulary, Completed an assessment that required them to create sentences using the given words,
Session 4	20 minutes	<ul style="list-style-type: none"> Filled in an evaluation consisting of open-ended questions.

Research Site and Participants

Participants included the principal, one English teacher, and 24 11th-grade students from a pharmacy vocational high school located in West Java. The principal was a male in his early fifties who had been at this school for 5 years. He is a graduate with a master's degree in educational administration, which equips him with strong leadership skills, and he understands his students' needs, particularly in mastering language skills that support the pharmaceutical field. The only English teacher in the school involved in this study holds a master's degree in English Education from one of Indonesia's leading universities. In her undergraduate studies, she focused on English for Specific Purposes (ESP), so she is already highly familiar with ESP and the needs of her students. Additionally, she teaches English in other Vocational Medical High Schools, in addition to this Vocational Pharmacy High School, and is certainly knowledgeable about ESP.

The study involved 4 11th-grade clinical pharmacy students, selected voluntarily from a pool of 24. The four students were two females and two males in grade 11, aged 16, chosen from 24 students who participated in the school's enrichment program, 22 females and 2 males.

Data Collection

Data for this study were collected through three instruments: classroom observation, interview, and document analysis. Classroom observations were conducted to assess the implementation of the ESP enrichment program at the pharmacy vocational high school and to evaluate the delivery of regular English classes. Interviews were conducted with the principal, the English teacher, and four 11th-grade students who participated in the enrichment program. The interviews were conducted using a semi-structured interview with an open-ended question format. Questions for the principal focused on his leadership and the process of initiating the ESP enrichment program. Meanwhile, the question for the teacher explored her

experience as an English teacher, her understanding of ESP, and her perception of the program's impact. For students, the interview questions focused on their perception of the ESP program that has been carried out, the impact they perceived on their English language skills, and their future expectations regarding the ESP enrichment program. Document analysis was employed to examine the syllabus, textbooks, students' worksheets, and students' assessments.

Data Analysis

The data from the seven audio-recorded interviews were transcribed verbatim using software and translated into English by the researchers. The transcripts were analyzed using thematic analysis following Braun and Clarke's (2006) six-phase framework: (1) familiarization with the data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. This approach allowed the researchers to identify patterns and key themes related to the research questions. In addition, the analysis was guided by qualitative research principles outlined by Creswell (2003) and Mackey and Gass (2005, as cited in Hild et al., 2021), particularly through the examination of recurring words (Airet, 2011; Guest, 2012; Saldaña, 2013, cited in Moncada-Comas, 2022). To illustrate these themes, excerpts from the interviews were presented in the results section, offering an in-depth understanding of participants' perspectives.

RESULTS AND DISCUSSION

Result

The enrichment program is essential in the in the ESP context because it helps address students' needs that are not adequately met in the regular classroom. Moreover, a study by Makel et al. (2012), cited by Hodges et al. (2017), found out that these learning programs, conducted outside the classroom, can significantly improve student target outcomes despite their short duration. The following qualitative findings are presented to answer the three research questions of this study related to the implementation of the ESP enrichment program. Each question was addressed in a different subsection.

The Role of the Enrichment Program in Improving the Pharmacy Students' English Language Proficiency

The ESP enrichment program is held after class as an additional English class that focuses on discussing the context of English for Pharmacy, which is not provided in the regular classroom. The material given in the program aims to fulfil the needs of pharmacy students for their future work fields. The program also allows students to familiarize themselves with pharmaceutical terms (for example, see Appendices 1, 2, and 3). Since the program was only recently implemented at the school, it was implemented only twice, covering four sessions.

The first session in the first meeting was an introduction to English for a pharmacy that included an overview of pharmaceutical English vocabulary and phrases (see Appendix 1). In the second session, there was a role-play where the students served as pharmacists. Students were divided into pairs of two people; one student acted as the customer and the other acted as the pharmacist. The vocabulary and sentences in the role-play were the ones they had learned in session 1 (see Appendix 2). In the third session, students learned more of pharmaceutical English vocabulary (see Appendix 3). They conducted an assessment in which students were asked to create sentences using the given words. In the fourth section, they were required to complete an evaluation consisting of open-ended questions (see Appendix 4).

From the identified interview data, we identified two themes related to the program's implementation: the impact of the ESP enrichment program and its future

directions. Regarding impact, the program has received a positive response from students because it has made them more familiar with English vocabulary in pharmacy. One student found the program engaging, noting that they discovered terms such as *dosage* and *medicine* are also used in English, not only in Latin.

Excerpt 1

The program was engaging. I discovered that terms like dosage and medicine are not just in Latin, but also have English versions. The program is suitable. It is indeed what we need. (Students 1)

Three students also added that the program was “*Suitable and engaging.*” Student 4 stated that the program’s activity of pronouncing new words could help them practice pronouncing English words correctly.

Excerpt 2

Learning pronunciation in the program helps us know how to pronounce words correctly. (Students 4)

Furthermore, the teacher stated that the program fostered positive student engagement and led to noticeable improvement in pharmacy-related English vocabulary.

Excerpt 3

In terms of improvement, meaning progress from not knowing to knowing, there is improvement. For example, initially, students did not know specific vocabulary or English terms, like ‘conical flask,’ and they eventually learned them—I think there is improvement. (English Teacher)

Furthermore, students experienced a direct recognition of improvement in their English skills. In particular, all four students interviewed reported that their English vocabulary had increased, and three also claimed that their speaking skills had improved. Student 3 reported that his speaking skills were enhanced through the role-play activity conducted in the program.

Excerpt 4

I have learned more vocabulary, and role-playing helps improve my speaking skills. (Students 3)

Student 4 also mentioned that role-playing can help increase his confidence in speaking in front of other students.

Excerpt 5

Yes, my conversation skills and my ability to speak in front of others improved. (Student 4)

Besides vocabulary and speaking skills, student 2 reported improvement in reading ability, explaining that prior to the program, they struggled to read in English but were now able to practice through activities in the enrichment program.

Excerpt 6

Before, I could not use English or read English. Now it is improving because I can practice reading in the enrichment program. (Student 2)

The program's implementation, which included familiarizing students with pharmaceutical English vocabulary and conducting speaking exercises in a role-play activity, helped them gain confidence in using English. The students also practiced their writing skills during session three, when they were required to write sentences using three selected vocabulary words they had learned in session 2. 15 of the students who completed the assessment were able to form sentences, although there were some grammatical errors (see Appendix 5). Additionally, the students' answers to the open-ended questions showed they understood the questions asked of them, even though they were written in English (see Appendix 6). In particular, they felt their ability to recognize new vocabulary, pronunciation, and speaking had improved. Students could also practice their reading and writing skills in this program.

The Role of the Principal's Leadership in Ensuring The Implementation of The ESP Enrichment Program

The enrichment program was implemented because the school's syllabus and textbook do not meet the English language needs of pharmacy students. The school used the *Kurikulum Merdeka* syllabus, a derivative of the Indonesian government's K-13. As for the textbook, the school used the textbook titled "English for Change" that was published by the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia in 2022.

The English teacher stated that neither the syllabus nor the government-provided textbook met students' needs, making it difficult for the English teacher to teach English at Vocational Pharmacy High School.

Excerpt 7

There is no curriculum and syllabus provided specifically for pharmacy students, and no teaching materials meet the students' needs. Even the textbooks provided by the government do not have anything specific for pharmacy students. (English Teacher)

For that reason, the English teacher initially discussed with the pharmacy teacher how to prepare the English materials that would be taught to meet the students' needs who later work in clinical pharmacy and industrial pharmacy. The principal then realized the lack of English learning and held the enrichment program with the aim that the program could meet the students' needs.

Excerpt 8

The program was implemented with the hope that it could meet the English language needs of the pharmacy students. Through discussions with the English teacher, the material covered in this enrichment program specifically addresses English for pharmacy only. It has only been conducted for two meetings so far, where each meeting consists of 2 sessions. (Principal)

Interview data indicated that the principal played a facilitating role in ensuring the implementation of the program. With the principal's approval and support, the enrichment program can be implemented. The school principal's role is important in fulfilling the needs of the students.

Students' and Teachers' Reflections Regarding the Implementation of The ESP Enrichment Program

Through participation in the ESP enrichment program, students learned pharmaceutical English vocabulary, practiced pronouncing these words, engaged in role-play activities to improve speaking skills, and practiced reading and writing.

Teachers and students stated that the program was engaging and aligned with the students' needs.

Excerpt 9

The program was engaging, and it suited our needs. (Student 3)

Excerpt 10

The program is good and has a very positive effect on students' learning. The students' participation is quite active (English Teacher)

The program was suitable for the students, whose activities include speaking, conversation, vocabulary, and phrases that help them practice effective communication in English. It also meets the needs of pharmacy students.

Excerpt 11

Pharmacy students need an emphasis on effective communication in English. During the program, the focus has been on speaking, conversation, vocabulary, and phrases that meet the needs of students at the Pharmacy Vocational School.

Moreover, this ESP enrichment program needs to be improved by finding the most appropriate time and by formulating its content to deliver effective learning in a limited time. The teacher suggested that the program should be maintained as a regular activity, though its scheduling requires further adjustment.

Excerpt 12

The program should be maintained or made routine. As for timing, we need to figure out when to schedule it. (English Teacher)

On the other hand, students expect more engaging learning, such as frequent use of audio and visuals, so they are not easily bored. One student expressed a preference for audiovisual learning methods, explaining that relying solely on text-based materials could feel monotonous.

Excerpt 13

I prefer audiovisual learning methods. I sometimes get bored when learning English by looking at e-books or texts. I want the program to include more visuals and engaging videos. (Student 1)

The students also hoped the program could continue for a long time, as they found it highly beneficial.

Excerpt 14

The program is suitable and should be implemented gradually. (Student 2)

Furthermore, the teacher stated that this ESP enrichment program needs to be implemented regularly to be sustainable and can have a specific impact on improving pharmacy students' English language skills. To support this, the program requires a structured syllabus with indicators of achievement that measure students' progress in English language skills. The teacher emphasized the need for a more systematic syllabus to guide the program's implementation and evaluation.

Excerpt 15

If we want to reflect or evaluate, we could create a more systematic syllabus from the program. With a syllabus, we have a reference. For example, we want to focus on achievement indicators in one semester. The program could then align with the existing syllabus, making it more structured, and we could track whether targets are met. (English Teacher)

DISCUSSION

This exploratory case study on the implementation of the ESP enrichment program yielded several significant findings. Firstly, the program received a positive response from students and met the needs of those that could not be met in a regular English classroom. Secondly, the program can help to improve students' English language skills through the learning activities and assessments provided. Thirdly, the principal's role as facilitator is important in implementing this program. Fourthly, this program should have a more structured syllabus and format to be implemented regularly.

Before interpreting the findings, it is necessary to outline the study's limitations. The study included only a small number of participants and was conducted in a single area of Indonesia, so it cannot be generalised. Also, the program analyzed in this study was implemented in a fairly short period of time, only four sessions, which could have been the impact of this program on students' language proficiency, can be further analyzed with a longer program implementation.

Despite these limitations, this study provided valuable insights into the implementation of an ESP enrichment program that is rarely discussed in previous research. This program could be the answer to the incompatibility between the syllabus and the textbook materials provided by the Indonesian government, which did not meet the English-language needs of pharmacy vocational students.

The program that has been implemented successfully has met students' needs by providing materials specifically for pharmacy students. These include an introduction to English for Pharmacy, pharmacy vocabulary, phrases, pharmacist dialogue, and an assessment related to English for Pharmacy. Not only does it meet students' needs, but the engaging learning activities can also increase student engagement. Students even mentioned that this program is "*Suitable and engaging*" for them.

The program could also improve students' receptive and productive skills. Students performed role-plays in front of the class, demonstrating improvement in their speaking skills. Even by participating in the role-play, students can overcome their speaking anxiety (Hild et al., 2021). Students can also create their own English sentences using the vocabulary they have learned, demonstrating that this program helps them practice their writing skills. Answering open-ended questions written in English could also show that students can read and understand the question. Students especially learned a lot of vocabulary and practiced pronouncing vocabulary words correctly.

The implementation of this program is inseparable from the principal's role as the school's facilitator. The principal is the school leader who oversees student accommodations. Therefore, the principal's role is important in conducting the program that meets students' needs and in determining the quality of the school (Purhasanah, 2024). Effective leaders are those who can influence others to achieve shared goals (Northouse, 2013; Yukl, 2011, cited in Putri et al., 2020). Leadership from the principal is an essential factor that supports the program so that students can meet the needs that are not fulfilled in the regular classroom.

Nevertheless, this study found that the program's structure remained unclear due to its newness. Therefore, a syllabus that provides more structure is needed. Moreover, the program should have more precise objectives to measure the extent to

which students' abilities are improved. Nevertheless, both students and teachers hoped the program could be implemented regularly.

To conclude, the ESP enrichment program has met the needs of pharmacy students. It can help improve pharmacy students' English proficiency, particularly in vocabulary, pronunciation, listening, and speaking, because the two sessions of the ESP enrichment program focus only on speaking and listening. What needs to be considered and improved for this ESP enrichment program is the sustainability of its implementation and the creation of a structured syllabus, so that the learning process can achieve the goals determined and clearly ensure the improvement of pharmacy students' English language proficiency.

CONCLUSION

This study aimed to determine the impact of an ESP enrichment program on improving the English language proficiency of pharmacy vocational students. The findings showed that the enrichment program can help enhance students' English language proficiency, particularly in vocabulary acquisition, pronunciation, and speaking confidence. Furthermore, the program successfully met the specific language needs of pharmacy students, which were not addressed in the regular English curriculum. Moreover, the principal's role as a school facilitator was important in implementing the program. His support provided an enabling environment for innovation and responsive curriculum development. The findings of this study could be the beginning of further implementation of ESP enrichment programs to meet the specific needs of vocational school students. In conclusion, this study revealed that the program improved pharmacy students' English proficiency and received positive responses from both students and teachers. The study suggests that the ESP enrichment program can serve as a practical model for vocational schools seeking to improve students' English proficiency in specialized fields. Future research is encouraged to investigate the long-term impact of a more structured and sustained ESP enrichment program, supported by a clear syllabus and assessment framework, to further validate its effectiveness in the vocational education context.

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