NEEDS ANALYSIS ON ENGLISH LANGUAGE LEARNING AMONG PHARMACY DIPLOMA STUDENTS

Atur Semartini
Sekolah Tinggi Ilmu Kesehatan Nasional, Surakarta, Indonesia
namaaku.tini@gmail.com

Abstract

English use in tourism sector is different from business or pharmacy field, so English language learning based on needs has to be carried out. To determine the needs for English language learning in certain fields requires a needs analysis whose results can later be applied in the curriculum. This study aims to investigate the needs of Pharmacy Diploma students for English language learning. The subjects of this study were 57 Pharmacy Diploma students who had also worked as pharmaceutical technicians. The data was obtained by using a questionnaire which was then analysed for its frequency, percentage, mean, and standard deviation. Based on the research, the most important skills for Pharmacy Diploma students were Speaking and Translation. Meanwhile, the most significant functions of English were to read scientific articles, operate tools or computers, and communicate with patients and colleagues. Furthermore, the problems experienced by Pharmacy Diploma students in the use of English were difficulties in understanding someone speaking English quickly and also vocabulary related to the health or pharmacy. It then can be concluded that English language learning needed by Pharmacy Diploma students is related to speaking, translation, and also vocabulary enrichment related to health and pharmacy. Compiling curriculum adjusting the needs and the use of English by students is recommended.

Keywords: English Language Learning, Needs Analysis, Pharmacy Diploma Students

INTRODUCTION

English is currently used in various fields, such as in the fields of health, technology, tourism, and economy. This inevitably requires educational institutions to include teaching English in their curriculum so that it can be taught to students as a provision for their careers later. In its current development, the curriculum is designed by focusing on students. Nunan reveals that students should currently no longer try to adapt to the existing curriculum on the contrary, the curriculum should be designed according to student needs (Gözüyeşil, 2014). Students who study English for Specific Purposes will get a job based on their study programs easily. Moreover, it is believed that students will have more motivation in studying if they study English following their field studies or work (Hidayati & Haryati, 2018).

Several studies show that different disciplines require different English language learning. Midwifery students are required to be proficient in speaking (Hidayati & Haryati, 2018). Likewise, students in the tourism sector admit that speaking was the most requisite skill

(Prachanant, 2012). Meanwhile, the skill prioritized in the Engineering department is Reading (Gözüyeşil, 2014). In contrast, students in Radio Engineering expect to develop Speaking and Translation skills (Baklazhenko & Savchuk, 2018). In other words, it is requisite for teachers to apprehend the needs and expectations, or the purpose of students in learning English so that teachers can create a curriculum, and design syllabus and materials according to the needs or expectations of students.

English for Specific Purposes is a way of learning English that focuses on students. English for Specific Purposes has 2 characteristics, namely having attention to the needs of students and including specific content or texts in learning activities (Dehnad et al., 2010).
Ching and Chang mention that English for Specific Purposes is learning that focuses on certain fields delivered in English with specific vocabulary, specific terms, and relevant matters (Hidayati & Haryati, 2018). Meanwhile, Otilia emphasizes that English for Specific Purposes is based on certain contexts and also the specific needs of students (Hidayati & Haryati, 2018). Hutchinson and Waters assert that English for Specific Purposes is not a product but a method. In other words, English for Specific Purposes emphasizes learning itself (Saliu & Hajrullai, 2016).

In the implementation of English for Specific Purposes, several factors must be considered so that the existing goals can be achieved. One of the factors is class preparation by designing a special syllabus with special exercises and materials. Designing teaching methods and material based on relevant contexts to produce effective and useful teaching and learning activities are important to do. Munby emphasizes that the needs or expectations of students are the centre of English for Specific Purposes, even the first step in designing English for Specific Purposes materials is knowing the needs of students (Karimi & Sanavi, 2014). As English for Specific Purposes is based on student needs, a needs analysis is imperative to conduct to ease designing materials and methods based on student needs. Thus, the objectives of learning can be achieved at the end of the English program (Indrasari, 2016).

Unfortunately, at this time there are a number of study programs or educational institutions that deliver the English language that is unrelated to the needs of students. Limited references and human resources are some factors causing learning English for Specific Purposes difficult to do.

To assist the implementation of English for Specific Purposes, it is necessary to perform a Needs Analysis to reveal the students' needs in learning English. Needs Analysis is the starting point in identifying students' needs so that teachers or institutions can design appropriate curriculum or learning materials. John views that needs analysis is the first process in designing a curriculum because needs analysis can present validity and relevance for the activities following curriculum design (Li, 2014). Hidayati and Haryati state that needs analysis is the foundation of lesson plans, syllabus design, material development and evaluation, assessment development, and instruction design. Needs analysis needs to be performed to find out students' comprehension and what they need to comprehend. Conducting needs analysis can provide information to the teacher about the knowledge and expectation of students. In addition, at the same time, needs analysis is necessary for assessing and classifying students' abilities. Based on the needs analysis, the teacher can develop teaching materials and activities (Hidayati & Haryati, 2018).

There are various models of needs analysis presented by experts. Dehnad mentions that there are several approaches to Needs Analysis, namely Target Situation Analysis and Present Situation Analysis. The Target Situation Analysis provides a detailed profile of student's language needs (Dehnad et al., 2010). Hutchinson and Waters reveal that the target situation

is an expected situation in which students will master the language they are learning. Robinson asserts that Target Situation Analysis is a type of needs analysis focusing on the students' needs at the end of a language program (Li, 2014). Furthermore, Robinson states that Target Situation Analysis focuses on the targets or goals that students want to achieve. Meanwhile, the Present Situation Analysis focuses on the student's present situation and reveals the gap between the present situation and the target situation. Present Situation Analysis confirms students' language skills when the language program starts, as well as students' strengths and weaknesses (Li, 2014).

Different approach is offered by Hutchinson and Water known as Hutchinson and Water's model. Hutchinson and Water divide needs analysis into three parts: necessities, lacks, and wants. Necessities is determined by the need in the target situation. Necessities are important requirements that enable students to employ them effectively in target situations. Lacks are the gap between necessities and what students already know (the abilities that students already have). While wants are subjective needs of students that have no direct relationship with objective needs (Dehnad et al., 2010).

Meanwhile, what is meant by learning needs is how students learn a language and also students' motivation in language learning, the way they like to learn, available resources, time and place, as well as personal information from students. Hutchinson described that "lacks" are starting points and necessities are goals. While the need for learning is a way to depart from the starting point to the goal (Dehnad et al., 2010).

Based on the explanation above, it can be concluded that to carry out a need analysis, some analyses must be conducted. First, the student's current situation (Present Situation Analysis) or known as lacks should be analysed, then the target situation (Target Situation Analysis) or also called necessities should also be analysed. Thus, the gaps that exist can be determined so that the actual needs of Pharmacy Diploma students can be revealed.

Studies that have been done prove that each field of study has different needs in English language learning, as well as Pharmacy. Pharmacy study programs in Indonesia are divided into several, namely Postgraduate, Undergraduate, Diploma, and Vocational Schools. Research related to needs analysis of English language learning in Pharmacy Diploma students has not been conducted so far. Thus, it is necessary to analyse the needs of English language learning to formulate the appropriate curriculum and materials for pharmacy students of the Diploma study program. This study aims to investigate the needs of Pharmacy Diploma students for English language learning.

METHOD

This study used a descriptive quantitative method with participants consisted of 57 Pharmacy Diploma students who took an employee class at a college in Surakarta. They were students in 1st-3rd grade. Participants consisted of 49 women and 8 men with an age range of 21-45 years. They had worked as pharmaceutical technician for 2.5-20 years. Students who also worked as pharmaceutical technicians were chosen considering that they already had working experience so that they also knew what a pharmaceutical technician needs for English.

The instrument in this study was a questionnaire used to determine the needs, functions, and problems of English used by pharmacy students. The questionnaires used include a checklist questionnaire and a rating scale questionnaire. The checklist questionnaire was used to see the functions and problems experienced by students in English use. Meanwhile, a

questionnaire with a rating scale was used to determine the students' present English skills (Present Situation Analysis) and also to determine the students' need for English (Target Situation Analysis).

The questionnaire was written in Indonesian to make it easier for respondents to fill out the questionnaire. The questionnaire was designed based on Prachanant's research (2012) with some modifications by discussing with the pharmacy lecturers and the English lecturer. Professional standards of pharmaceutical technicians issued by Indonesian Health Minister (Menteri Kesehatan RI, 2008) was also used in designing questionnaire.

Data was collected by distributing questionnaires to students during class learning. Students were given sufficient time to fill out the questionnaire and they did not need to fill in their names in the questionnaire so that they felt free to express their opinions in the questionnaire. Questionnaires were distributed during March 2021.

The data obtained were then analysed quantitatively using SPSS. Likert scale was used to analyse the rating scale questionnaire. Mean and Standard Deviation were used to determine the Present Situation or skills currently mastered by students as well as to determine the skills needed by students. The highest mean showed the skills that were mastered and needed by students. While the lowest mean showed the skills that were less mastered and less needed by students. Meanwhile, frequency and percentage were used to determine the function of English and the problems experienced by students related to the use of English. The data related to the functions and problems of using English can describe the use of English in the Pharmacy field specifically, as well as depict the existing gaps related to mastery of the English language.

Table 1. Likert Scale

Mean Range	Need Level
4.5 – 5.0	The Highest Need
3.5 – 4.49	High Need
2.50 – 3.49	Moderate Need
1.50 – 2.49	Low Need
1.00 – 1.49	The Lowest Need

RESULTS AND DISCUSSION

Needs analysis needs to be conducted to find out what students already master and what students need to master. Therefore, this study determine the English skills or abilities that are already possessed by students who also work as pharmaceutical technicians. After that, it is requisite to find out the students' necessity in learning English. Finally, it is necessary too to investigate what can be a "vehicle" for students to achieve the need or target for English learning. To figure out which vehicles can be used by students to achieve targets or goals, the functions and problems of using English are also analysed in this study.

Present Situation Analysis of Pharmacy Students
Present Situation Analysis is a step to find out what students have already mastered. The English skills mastered by Pharmacy Diploma students can be seen in the table below.

Table 2. English Skills Mastered by Pharmacy Diploma Students

English Skills	Mean	Standard Deviation	Meaning	Rank
Listening	2.7193	.99560	Pretty Good	3
Speaking	2.4386	.92616	Sufficient	6
Reading	2.9123	1.03993	Pretty Good	1
Writing	2.7544	1.02261	Pretty Good	2
Vocabulary	2.4737	.92785	Sufficient	5
Translation	2.6842	.96655	Pretty Good	4
Total	**2.6637**	**.98721**	**Pretty Good**	

Based on findings, the skill mastered by most Diploma Pharmacy students was Reading, followed by Writing and Listening. However, the skills they mastered were at Pretty Good level. In other words, those skill was on average level. Meanwhile, the skills that were least mastered by Diploma Pharmacy students were Speaking and Vocabulary.

Target Situation Analysis of Pharmacy Students
English Skills Needed by Pharmacy Students

Table 3. English Skills Needed by Pharmacy Diploma Students

English Skills	Mean	Standard Deviation	Meaning	Rank
Listening	3.9825	.81265	Necessary	5
Speaking	4.0877	.87179	Necessary	2
Reading	4.0526	.74213	Necessary	3
Writing	3.8947	.85949	Necessary	6
Vocabulary	4.0175	.71941	Necessary	4
Translation	4.1754	.68460	Necessary	1
Total	**4.0351**	**.78396**	**Necessary**	

This section presents the most needed skills by Pharmacy Diploma Students. Students stated that they needed Translation and speaking more than other skills such as Reading, Writing, and Listening. This finding was in contrast to the skills they mastered. The skills that were less needed by students are writing and listening while the skill that students mastered was Writing and Listening.

English Functions for Pharmacy Students
Research on the function of English provides a more detailed picture of students' needs. In addition, recognizing the function of English in the student's field of work can aid the teacher in designing curriculum and materials later. The English function in students who also works as pharmaceutical technicians can be seen in the following table. The following table describes the top 5 functions of English in Pharmacy Diploma students.

Table 4. English Function for Pharmacy Diploma Students

English Function	Frequency	Percentage
Communicate with patients, colleagues, and customers	33	11,50
Read instruction/ procedure	32	11,15
Read scientific articles	40	13,94
Operate computers	38	13,24
Educate patients, colleagues, and customers	33	11,50

Respondents in this study claimed that English was mostly used in Speaking and Translation, namely to read scientific articles or read instructions/procedures as well as to provide education and communicate with patients and colleagues.

Problems of English Use Experienced by Pharmacy Students

Research on the problems experienced by students in mastering English skills is also needed to figure out what "vehicles" can be used to or achieve the targets or needs of students. Not only that, determining the problems faced by students in mastering English skills can reveal the gap between the present situation analysis and target situation analysis. By determining the gap, teachers can design the appropriate curriculum to close the gap. The following are the problems of English use experienced by pharmacy students. Table 5 presents major problems experienced by students in English use.

Table 5. Problems of English Use Experienced by Pharmacy Diploma Students

Problems with English Use	Frequency	Percentage
Difficulty in understanding someone who speaks English quickly	45	15,90
Difficulty in knowing what other people are saying in English	19	6,71
Difficulty in understanding accents in English pronunciation	28	9,89
Do not have confidence in speaking English	27	9,54
Do not have enough English vocabulary, especially specific terms related to health and pharmacy	23	8,13
Unfamiliar with English text	19	6,71

Pharmacy Diploma students experienced some problems or difficulties in using English. However, the biggest problem that students had in using English was speaking. Students had difficulty because they did not understand people speaking quickly in English. This can be triggered by students' inability of recognizing English correct pronunciation. Students' confidence to speak English was also a problem experienced by students.

The findings of this study are in line with Hidayati & Haryati (2018) and Srinawati (2019) found in their research. Although their research targets were different, their study also examined the use of English by health human resources. They also found that speaking was the skill most needed by students in health sector. This surely cannot be separated from their work which has to deal and communicate with patients.

Discussion

Based on the analysis that was conducted, it is found that the skills related to English which is considered more important than others are translating. It is certainly related to the work of a pharmaceutical technician that deals with English scientific articles as references in conducting analyses or tests. Besides that, in carrying out various analyses or tests, a pharmaceutical technician also operates various tools whose procedures are usually in English. Therefore, a pharmaceutical technician needs to have skills in translating English into Indonesian.

It is confirmed in the professional standards of pharmaceutical technicians (Menteri Kesehatan RI, 2008). In the professional standard for pharmaceutical technicians issued by the government, it is written that one of the jobs or competencies of pharmacy technicians is to perform analytical procedures such as proximate analysis and contamination analysis.

By that result, reading skills are in the top three in English needs, as shown in table 3. This proves that for students, reading skills are considered important. It is also related to the work of pharmacy technicians who have to read articles and also read instructions or procedures in English and also translate them to comprehend them. Fadica views that there is a positive correlation between the ability to comprehend the text and the ability to translate. This research argues that the higher the reading comprehension score, the higher the translation ability score (Fadica Rahemi et al., 2013). In other words, reading and translation skills are interrelated so that they are considered important by students. As translation skills are required by Pharmacy students, it is highly necessary to improve translation skills for students.

On the other hand, writing is at last rank as a skill needed by pharmacy students. This is also inseparable from the work of a pharmaceutical technician which is related to writing (writing reports) but does not require English. Meanwhile, the skill that ranks 2nd in the English language needs of pharmacy students is Speaking. Based on the present situation analysis, speaking skill is at the lowest rank mastered by students. This shows that the speaking skills are the lowest of other skills or abilities. However, according to students, speaking is one of the skills most needed by students. In other words, pharmacy diploma students need a big improvement in speaking skill.

Srinawati in her research also found that speaking is one of the skills considered important for students in pharmacy vocational school. However, speaking is also one of the difficulties experienced by pharmacy vocational school students (Srinawati, 2019).

This result is also following the job of pharmaceutical technicians. Communicating with other people is one of the competencies that must be performed by a pharmaceutical technician. What is meant by communicating with other people here is such as providing information/education, providing counselling, performing drug delivery procedures, or carrying out self-medication service procedures (Menteri Kesehatan RI, 2008).

Furthermore, another problem experienced by students in English use is related to vocabulary. One of the problems experienced by students is that students do not have sufficient English vocabulary, especially specific terms related to health and pharmacy. Lily claims that to have good skills in Listening, Speaking, Reading, and Writing, one must have good vocabulary mastery. In addition, she also argues that there is a correlation between vocabulary mastery and students' comprehension of English for Specific Purposes texts (Lily, 2019). A similar idea is also conveyed by Sidek and Rahim who reveal that vocabulary knowledge is a determining factor for the success of reading comprehension (Sidek & Rahim, 2015). In other words, teaching vocabulary, especially vocabulary related to health and pharmacy, is very important to be taught as a foundation for students to master other skills, such as speaking, reading, and translation.

This study investigates the needs of Pharmacy Diploma students for English so that the gaps that exist in learning English language can be determined and then design a new curriculum and learning methods that suit their needs. Based on the analysis, speaking was a skill needed by Pharmacy Diploma students, on the contrary, most students did not master Speaking. Students experienced difficulties in Speaking. Therefore, the curriculum and learning methods that will be compiled later must emphasize the development of students' speaking skill.

Leong writes that Speaking is the most important skill to develop but is considered the most difficult skill. Most people feel they are unable to express their thoughts well in English because sometimes they cannot find the right vocabulary. In other words, to develop

speaking skills, it is important for teachers to enrich students with vocabulary (Leong & Ahmadi, 2017). In this case, teacher should include health and pharmacy vocabulary learning in the syllabus to improve Speaking skill.

Furthermore, according to Doff, to improve speaking means to improve listening. It is impossible for speaking skill to improve if listening skill is not improved. Students need to listen and understand what the other person says to be able to respond and have an effective dialogue (Leong & Ahmadi, 2017). In addition, by improving listening, students can improve their pronunciation, as pronunciation is one of issue experienced by students. Listening activities can aid students in producing correct pronunciation (Cakir, 2012).

To improve speaking skill, it is also important to choose a topic that relates to students. Therefore, it is important for teachers to understand the world of students so that the topics raised can trigger students to talk actively. Bachman and Palmer state that the topics raised in speaking practice had a significant influence on improving students' skills (Leong & Ahmadi, 2017). Teacher can choose a topic related to students' life or pharmacy and health, such as counselling or dialogue with patient. By practicing counselling and dialogue with patient, students will be able to deal with the function of English by pharmaceutical technician.

An important factor to improve speaking skills is to provide feedback on students' speaking skill. However, it should be noted that feedback does not always have to be corrective. Teacher must be able to convince students to be confident and not be afraid to make mistakes in speaking English (Leong & Ahmadi, 2017). Last but not least, teacher is also very influential on the development of student skills. Teacher's personality can motivate students to practice speaking (Irwan et al., 2017).

CONCLUSION

The conclusion of this study is that Pharmacy Diploma students have a high need for English Speaking skill. This skill is needed by Pharmacy Diploma Students regarding their job to provide education to the public regarding health and medicine. In contrast, students still experience difficulties in Speaking English.

As the implication, it is important for institutions or teachers to develop learning materials and curriculum that emphasize Speaking skill. This indirectly requires learning specific terms, especially those related to health and pharmacy. This also has implications for the English language teachers in the Pharmacy school. English language teachers in Pharmacy school must also have English for Pharmacy skills, especially speaking skill supported by specific vocabularies on health and pharmacy. English language teachers should also develop method to help students have confidence in Speaking. In addition, institutional should provide training for English language teachers to be able to master English for Pharmacy as most English language teachers do not study Pharmacy during their study on college. Furthermore, it is also recommended that a continuous evaluation or needs analysis be carried out periodically related to the curriculum, method, and teaching materials that have been produced from this need analysis, considering that knowledge grows continuously.

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About the Authors

Atur Semartini teaches English at Nasional College of Health Science (Sekolah Tinggi Ilmu Kesehatan Nasional). She completed her undergraduate degree at Sanata Dharma University, and M.Hum. at Sebelas Maret University. Her research interests include English Language Teaching and Learning and also Discourse Analysis. She has published a book entitled *Auto-Drill Ngomong Inggris Sehari-hari*.