

Needs Analysis of English for Biomedical Laboratory Students at Medical Vocational High School of Prof. Dr. Moestopo

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The increasing number of vocational schools has contributed to the rapid expansion of English for Specific Purpose (ESP) in Indonesia. The first stage in developing learning materials for ESP is conducting needs analysis. It refers to activities in collecting information as the basis for academic development of a particular group of students. The aims of this study were to investigate and analyse the needs of students in learning English at Medical Vocational High School (SMK Kesehatan) of Prof. Dr. Moestopo. The data were collected through questionnaires and interview. The result showed that: 1). Students tend to learn English because of their needs to improve language competences than to prepare their professional job in the future, 2). Students need more practices in speaking compared to other language skills, 3). Students need materials that meets their needs, particularly in general and medical vocabulary since most of them have difficulties to understand the meaning of words, 4). The teaching method that suit to the students were based on the materials itself. It can be teachers or students centred learning. This study recommended that students need more extra times to learn English. Besides, teachers should create supportive learning environment to motivate them in study English.

Keywords: *English for Specific Purpose, needs analysis, vocational high school*

Introduction

Many domain of life and society has been influenced by the English as an international language (Hossain, 2013). It becomes the dominant language as the medium of communication in specific fields, for example: trade, diplomacy, biomedical, tourism, maritime, technology, etc. Consequently, the developing interest of English has added to the quick extension in English for Specific Purpose (ESP) since 1960 (Otilia, 2015). ESP is a way to deal with language teaching in which all decisions as to substance and strategy depend on the purpose of students in learning (Hutchinson and Waters, 1987).

It deals with preparing students to be ready to use English in academic, professional or workplace setting. It is all completely different with General English (GE) that focus to provide students' knowledge and practice to be able to speak English for general aims. ESP theoretical framework includes its various stages in terms of needs analysis, syllabus design, materials production, methodology, implementation, and evaluation (Qattous, 1995).

Further, the first stage to consider when designing ESP materials is needs analysis. It refers to the distinct and necessary activities in planning an educational programs and curriculum development. It involves collecting information about particular group of students (Tzotzou, 2014; Al Hamlan, 2015). Actually, the students' involvement has great significance in every step of educational process (Bouabdallah, 2015). According to Duddley and St. John (as cited in Otilia, 2015), there are eight components in today's concept of needs analysis which have been grouped into five broad areas including: 1). target situation analysis, 2). linguistic, discourse, genre analysis, 3). subjective needs analysis, 4). present situation analysis for the purpose of identifying learners' current skills and language use, 5). means analysis.

Meanwhile, ESP should be taught by English teachers who understand both the technical content and language teaching in vocational high schools. So that, a teacher have to teach materials which portray the students' specific subject-matter and their needs (As Buriro, 2013). In fact, most English teachers of vocational high school in Indonesia only teach General English (GE) to their students. To this reason, the writer interested to analyze the English needs of students in Biomedical Laboratory major at Vocational High School of Health Sciences (SMK Kesehatan) Prof. Dr. Moestopo". Moreover, the research questions of this study are as follows: 1). what are the students' perspective of English in relation to their professional needs, 2). what are the needs of Biomedical Laboratory Students, particularly in language skills, 3). what kind of learning materials do the students need most, 4). what is the most appropriate teaching method for students.

Methods

This study was conducted through quantitative and qualitative method to answer the research questions. The research instruments of this study is a set of questionnaires which is arranged in multi-option question pattern. This questionnaire was distributed to 50 students from two classes in the third grade of SMK Kesehatan Prof. Dr. Moestopo. The first and second grade were not chosen to participate in this study because they were still in the beginning of their study, and they could not give clearly idea on their needs toward English learning (Alastal & Shuib as cited in Ibrahim, 2016). In addition, an English teacher were also invited to participate in this study through semi-structured interview.

Results

Students Perspective of English in Relation to Their Professional Needs

Q1. How is your language ability?

Table 1. Result of Q1

Very Good	2
Good	52
Poor	42
Very Poor	4

The aim of this question was to know the students perception of their English ability. From the table above, it is obvious that just over half of students in this study stated that their English language ability were good (52%). In contrary, 42% of the students rated themselves as poor in the language ability. Besides, there were 2% of the students who viewed that their English were very good, and for about 4% of the students considered that their English very poor. Actually, the number of students who thought they have good and poor ability in English were fairly balanced.

Q2. What do you think about your English development during your study at your school?

Table 2. Result of Q2

My English level is not increased	26
My English level is increased	42
Not sure if it increases or not	32

For question number 2, there were 42% of students thought that their level of English were increased during studying at school. Further, 32% of students were not sure whether their English level increase or not. Besides, 26% of students stated that they level of English were not increased.

Q3. Why are you learning English?

Table 3. Result of Q3

Compulsory subject in school	14
Prepare for studying in University	4
Improve language skills ability	70
Widen job opportunities	10
Go abroad	0
Interact with others	0
Others	2

The table above shows that to improve language skills ability as their main reason to learn English (70 %). Meanwhile, 14% of the students thought that their reason to study English because it was a compulsory subject. None chose to go abroad and to interact with other as their reasons to learn English. In addition, there were 2% of the students who viewed that all the given answers were the correct answers. It seems that most of students were aware about the importance to study English. As stated by Hutchinson and Waters (1987) that most of language learners are mindful of the purpose for which they learn the language.

The Needs of Students in English Language Skills

Q4. What kind of English language skills do you need to improve?

Table 4. Result of Q4

Listening	16
Speaking	66
Reading	10
Writing	8

It was found that students need to improve speaking skills (66%). For about 16% and 10% of the students stated that listening and reading become the skills which they need to improve. There were only 8% of the total number students who choose writing as the skill they need to improve. Robison as cited in Boroujeni (2013) explained that oral proficiency is the best indication of language mastery. This seems a reason for many students to choose speaking as their most wanted skills to improve.

Q5. What skills are most often taught in class by your English teacher?

Table 5. Result of Q5

Reading	12
Listening	32
Speaking	45
Writing	14

According to the table 5 above, the most often taught skills in the class by teacher was speaking (45%). Listening (32%) in the second place as the most often taught skills in the English class. Furthermore, there were 14% of the students who choose writing and 12% of students who stated that reading was the most often taught materials by teacher in the class.

The Most Needed Learning Materials

Q6. Do you think that English materials at school has meet your needs to be a biomedical laboratory analyst?

Table 6. Result of Q6

Yes	40
No	10
Sufficient	50

According to the table above, 50% of the students stated that English language teaching materials was sufficient to meet their needs as a biomedical laboratory analyst. Meanwhile, 40% of students viewed that English language teaching materials had fulfilled their needs. There were only 10% of students who thought that the materials had not fulfilled their needs as biomedical laboratory analyst candidate. Actually, based

on the interview, the teachers used the General English book for vocational high school. It was not particularly concern to English for biomedical laboratory. It seems that the students have lack of knowledge regarding to ESP and their needs as laboratory analyst in the future.

Q7. How important is vocabulary practice for you in the class?

Table 7. Result of Q7

Strongly Important	38
Important	62
Not Important	0
Strongly Not Important	0

As seen in table 7, it is obvious that students agreed to the importance of vocabulary practice in the class. There were 62% of students who stated strongly important to have vocabulary practice and followed by 62% students who agreed that vocabulary practice were important. None of students who stated disagree to the statement that vocabulary practice was not important.

Q8. How important is grammar practice for you in the class?

Table 8. Result of Q8

Strongly Important	30
Important	70
Not Important	0
Strongly Not Important	0

The purpose of this question was to know the perspective of students in grammar practice. Based on the table above, a large number of students stated that grammar practice were important (70%). Besides 30% of the students thought that grammar practice were strongly important. No one of students who viewed that grammar practice was not or strongly not important.

The Appropriate Teaching Method for Students

Q9. How is your favorite English class?

Table 9. Result of Q9

Class with a lot of activity group work/pair	42
Class with working alone activities	14
Class with teachers explain more and less activities for students	44

44% of students preferred a class with more explanation from teachers and less activities for them. This result might have correlation with the first question which asking students' ability in English. For about 42% of students thought that they have poor ability in English so they preferred to have less activities or teachers-centered learning. Moreover, 42% of students' preferred group or pair work compared to working alone activities. There were only 14% of the students who choose working alone pattern as their preference in the language teaching class.

Q10. What is you difficulty in studying English?

Table 10. Result of Q10

Many vocabularies are not understood	56
Difficult to say in English	38
Others	6

Just over 56% of students thought that they have difficulties to understand vocabularies. Besides, 38% of students faced difficulties to speak in English. Others difficulties thought by students were: 1). typo in writing, 2). could not understand what the teachers explain. It can be inferred that students need more vocabulary practice in language teaching.

Q11. Is the time to study English at school enough to learn English?

Table 11. Result of Q11

Yes	36
No	38
Others	26

The table 11. shows that 38% of the students viewed that the duration in studying English at school was not enough. For about 36% students stated that the time allocation to study English was enough. Further, 26% of students thought that they need to learn English more, for example: every day, three hours a day, twice in a week, three times in a week, or four times in a week. The more study time and practice to study English, will certainly be balanced with students' ability in English language.

Q12. What are your suggestions for better learning of English at school?

Table 12. Result of Q12

Learning materials meet the students' needs.	28
The improvement of teaching method	66
Others	6

A majority of students, which is about 66% of students suggest the method of teaching learning of English should be improved. This improvement in teaching method will motivate students to study English so that the goals of learning English can be achieved. Aside from that, approximately 28% of students thought that the learning materials should be in lined with students need for the future career. Some students (6%) suggest the teacher and students to use English during the class and institution provided such an English club as extracurricular activities for students.

CONCLUSION

To conclude, most students learn English because they want to improve their language skills compared to their professional needs in the future. Further, students need more practice in speaking since most of them face difficulties to speak in English. Students need more materials which meet their needs as laboratory analyst candidate and they need more general vocabulary building in the classroom due to their difficulties in understanding words. They also need to learn biomedical term in English. Moreover, the teaching method were decided by teachers based on the material itself. It can be students-centered or teachers- centered learning.

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