

Students' Need Analysis on Mechanical Drawing Department at SMKN 1 Padang

Hevriani Sevrika¹, Armilia Riza²

^{1,2}Program Studi Pendidikan Bahasa Inggris, Fakultas Ilmu Sosial dan Humaniora, Universitas PGRI Sumatera Barat

Email: sevrikariecha@gmail.com, rizaridwan23@gmail.com

Abstrak

Penelitian ini dilatarbelakangi oleh belum diterapkannya program pengajaran bahasa Inggris secara khusus yang menyesuaikan pengajaran bahasa Inggris dengan kebutuhan yang diperlukan oleh siswa. Tujuan dari penelitian ini adalah untuk mengetahui apa sajakah kebutuhan siswa jurusan Teknik Gambar Mesin pada bahan ajar Bahasa Inggris. Penelitian ini dilakukan dengan menggunakan penelitian kualitatif di SMK N 1 Padang dengan menggunakan *Total sampling*, yakni pengambilan *sample* berdasarkan kebutuhan dari *research question*. Kemudian, penelitian ini melibatkan 18 siswa dalam satu kelas dengan teknik pengumpulan data menggunakan alat *open-ended question*. Penelitian kebutuhan siswa pada bahan ajar bahasa Inggris ini melibatkan tiga aspek analisa kebutuhan, yaitu dengan melihat *necessities* (keperluan), *lacks* (kekurangan) dan *wants* (keinginan). Dari kategori *necessities* ini di temukan bahwa siswa memerlukan materi bahasa Inggris yang mudah di pahami karena siswa belum mengerti berbahasa Inggris dan siswa juga memerlukan kelancaran berbahasa Inggris agar memudahkan siswa untuk masuk ke dunia kerja, kemudian pada kategori *Lacks* di temukan bahwa siswa memiliki masalah pada penguasaan kosakata dan pengucapan bahasa Inggris sehingga siswa susah memahami pelajaran bahasa Inggris. Sedangkan pada kategori *wants* di temukan bahwa siswa menginginkan agar lancar berbahasa Inggris dengan *speaking* sebagai *skill* utama yang siswa inginkan untuk bisa mendukung siswa di dunia kerja setelah lulus dari jurusan Teknik Gambar Mesin.

Kata Kunci: *Students' Needs Analysis, Mechanical Drawing Department*

INTRODUCTION

ESP (English for Specific Purposes) identified as English learning material program presents to set the language teaching and learning based on the reason on how the language will need. According to Day and Krzanowski (2011:5), ESP (English for Specific Purposes) involves teaching and learning the specific skills and language needed by particular learners for a particular purpose. It defines that in running ESP program needs to analyze who needs ESP and how the language uses for students. Then, ESP program adjusting the purposes with academic and occupation based on the result of need analysis as a systematic and comprehensive. Need analysis means as a phase in gathering the data on what the students need on learning material which identifying the language that students will need and how the students' knowledge in present situation.

Moreover, as a teacher in vocational school, she or he should know what do the

students' needs in learning English. Teachers can design and collect the materials that the students' needs. ESP practitioners must be the teachers who design the learning process according to the needs of English in their respective majors. Then, they are also providers and designers of learning materials that are able to make their students master English language skills in accordance with their vocational (Mayuasti and Armilia: 123).

In real condition, English for Specific Purposes has not applied yet at Vocational High School and it occurs as English for General. Referring to pre-observation on students' need analysis on English learning material which have been done by the researcher in Mechanical Drawing department of SMKN 1 Padang, the researcher found that English learning material which received by the students, it is not based on the analysis of the students' need. It is because, the Learning material based on the curriculum of KTSP on

the syllabus that almost all of the learning material are general such as learning about daily conversation, direct interaction in hotel, use expression in giving compliment, expression to show opinion although there is material that appropriate to students' course that is the procedure in describing how things are operated. It explained that almost English materials are general, while the courses at SMKN 1 Padang are technical.

From the problem that present in this study, the researcher planned to analyze students' need on English learning material at Mechanical Drawing of SMKN 1 Padang, and the researcher gets a conclusion that students' need on English learning material at Vocational High School especially in Mechanical Drawing have to view in deep in order what the students' receive is significant to the students' life in academic, daily activities and in their occupation in the future.

To support the truth of the research, the researcher views the related finding that discussed about students' need analysis. The first research reviews from Presidency University by Jamal (2013) which discussed about need analysis with entitle **ESP Need Analysis for Engineering Students: A learner Centered Approach**. The purpose of this study is to find out the needs and wants required for effective professional communication in English writing and speaking proficiency for engineering students at Presidency University, Dhaka. From the results of the study a number of important facts could be found. Those are:

1. The learners had an average level of proficiency in the target language
2. The content areas of Business Communication and Advanced English Communication should be related to engineering because in future they would work as technicians and managers in their fields.
3. Though many of them could write and speak correctly, they were better in writing than speaking.
4. They could not produce analytical, coherent and cohesive writing and often failed to create well-organized paragraphs. None of

them could speak in context, with fluency and intonation. Therefore, improvement of writing and speaking skills are very urgent for them.

5. They did not have any background in Business Communication why they lacked the skill of writing business correspondence.
6. Their past language learning experiences were not so good why development of professional communication in writing and speaking was a great necessity for them.
7. The instructional materials should be delivered not only face to face, but also using Internet and multimedia presentations with sound system.
8. The existing classroom resources (i.e. white-board, multimedia projector, OHP, etc.) were not sufficient. Therefore, a classroom with Internet and multimedia facilities along with sound system and decorated with posters and maps with speaking and writing tips, phrases and idioms, puzzles, vocabulary learning tips, etc. was required i.e. English. So they needed to learn Business Communication or Advanced English Communication for use in their future profession in their home country mainly. And they would use their communication proficiency for writing business correspondence as well as for oral communication.
9. Attendance in the course classes should be mandatory and an integral part of course evaluation.
10. The course materials should be chosen from different sources like textbooks, instruction equipment manuals, CDs, DVDs, videotapes, and other materials used in content courses or to train people for a job; materials used on a job, such as work forms, charts and samples of relevant course assignments and student papers; as well as materials from websites like business letters, dialogues, instructions, telephone conversations, pod-casts, vodcasts, etc.
11. They should be advised for this course during the end of their engineering program.
12. The course classes should be held in the early hours of the morning or evening.

Then, the second reviews from Ahmed (2013) with entitle **A Study of Needs, Problems**

and Wants of Using English of Engineering Students at Quaid-e-Awam University of Engineering, Science and Technology, Pakistan. The purposes of this research are:

1. to investigate needs of engineering students to use English
2. to find problems of engineering students in using English in their academic and professional studies
3. to explore the students' wants regarding the purpose, content and methodology of engineering students to use English at QUEST Pakistan. Research has resulted in a significant discourse on needs analysis.

However, much remains to be explained in order to satisfy learner needs more effectively in ESP. It is worth for engineering university to develop an ESP syllabus in order to solve language teaching and language learning problems.

In addition, the next reviews from University of Tirana Albaniaby Paci (2013) with entitle "**Needs Analysis and Environment Analysis: Designing an ESP Curriculum for the Students of the Polytechnic University of Tirana**". The purpose of this research is to explain how to conduct needs and environment analyses for the engineering students in the Polytechnic University of Tirana and how to include them in the development of an ESP curriculum. The focusing this research is on students' needs, objectives, expectations and learning styles as well as by taking into consideration the learning environment is improved the teaching/learning of a language for specific purposes. As a result, there should be developed a curriculum which takes into account this heterogeneity but at the same time meets the students' needs in accordance with the learning environment in PUT where there is a qualified teaching staff that develops learning activities without a language laboratory and with a reduced number of hours available for foreign language learning.

This research is related to the researches above, but the differences are about how this research analyzes the students' need on English learning material at Mechanical Drawing of Vocational High School and what the students' needs which involved collect the data about students'

necessities, lacks and wants on English learning material. The research about analyzing students' need on English learning material should underline that different learners will different needs in learning.

METHOD

Research design of this research was qualitative research. To discuss about qualitative research design, the researcher used case study as a qualitative approach in this study. Moreover, Gay et al (2012: 443) also state that case study is a qualitative research approach in which researchers focus on a unit study known as a bounded system. (e.g individual teacher, a classroom, or a school). It explained that a case study was a study about on a unit. To answer the research question, the researcher had done analyse students' need on English learning material at Mechanical Drawing at SMKN 1 Padang and the researcher used the qualitative research in analyzed the research based on the fact in the field and the data had collected through the questionnaire. Then, this research had purpose to find out what the students' need on English learning material at Mechanical Drawing at SMK N 1 Padang.

RESULT AND DISCUSSION

In this step of the research, the researcher classified the data analysis based on the specific data description that described the students' choices and students' reasons in chose the option. The discussion of the data analysis discuss as followed:

1. Necessities

a. The Demands of Target Situation

Based on indicator about the demands of target situation that involved two questions number one and number two from the question; **in learning English, You need more English for.** There were 7 of students who chose good communication in English with the reason in order speak in English fluently. Then, 3 of students chose to help in technical with the reason because Mechanical Drawing many using English. Next, 1 of students chose to support the final examination with the reason in order to get high score in Technical examination.

Last, 7 of students chose to support English skill in working with the reason in order come to working field easily. It could be concluded that in learning English, the students needed have a good communication in English and support English skill in working.

Then, from the question number two; **in learn English, which one the skill that you really need.** None of students did not choose writing skill, 11 of students chose speaking skill with the reason in order easy in communication and increase speaking skill. Then, 1 of students chose listening with the reason because there were words that have similar sound, and 6 of students chose reading with the reason easy to be understood and so many technical tools used English. The conclusion based on the question about English skill that students' needed at Mechanical Drawing was speaking in order the students could communicate and increase the higher speaking skill.

b. Fit it Into Required Knowledge

Based on this indicator from the question number three, the question was about **how is the appropriateness English that you have learned in your department.** 7 of students chose not yet because the students got difficult in understanding about English and they were not mastering vocabulary yet. Then, 4 of students chose appropriate with the reason already understand easily, 7 of students chose less appropriate because the students were not fluently yet and the material was not applied based on English technical yet, and none of the students did not choose not appropriate. It defined that the appropriateness English which applied in Mechanical Drawing was not appropriate yet because the students were difficult in understanding English and they were not mastering the vocabulary yet. Moreover, English was not applied as English for technical yet.

c. The Learners Need to Know in Target Situation

Referring to the data analysis about this indicator there were two questions that stated at number four and number five, from the question about **in learn English, how material that you need.** 8 of students chose discuss about daily activity with the reason it could be practiced, easy to be understood, easy to remembered, it was habit. Then, 6 of students chose discuss about English vocabulary because vocabulary easy to be understood and it influenced to get good communication, and 4 students chose English in technical with the reason the students of mechanical needed English for working field. Then, none of the students did not choose hot issues in society. It could be concluded that the students needed the material about daily activity because daily activity was easy.

Then, from the question number five about **in English teaching and learning process, you need more learn by.** 3 of students chose learning material book with the reason it easy to be understood, the student could learn vocabulary and they could learn at home. Next, 2 of students chose answering the assignment in LKS because the students could understand about the content and it could be understood easily. Then, 6 of students chose practiced in front of the class with the reason students could be understood easily, fluently and they got self-confident. Last, 6 of students chose the teacher explained the material because if the teacher explained the material, it could be understood easily. Based on the data above, it could be concluded that in teaching and learning process the students needed to learn by practiced in front of the class and the teacher explained the material.

d. Able to do Function Effectively in Target Situation

From this indicator that stated at number six and number seven, based on the question number six; **how English learning style that you need.** 6 of students chose speak in English in every English class with the reason the students more understand about English and they could speak English fluently. Then, 2 of students chose searching the information from the internet because it help and easy. Next, 2 of students chose read the book and the other sources with the reason the students got better in

communication and they got many vocabularies from the book. Last, 8 of students chose to listen the teachers' explanation because the students could be understood easily. It can be concluded that learning style that students needed was listening the teachers' explanation.

Then, based on the question number seven was about **what is your learning style which often you use in studying English**. 3 of students chose individual with the reason concentrate in learning and the students like learning in individual. Next, 12 of the students chose group because the students could work and enjoy together. Then, 2 of the students chose pair with the reason more understand each other. Last, 1 of the students chose to write the other option by his own that was about listened teacher's explanation and took a note the important point which taught by teacher. It could be concluded that the students often had group work in studying English because they could learned together.

2. Lacks

a. What the Learners Know Already

Referring to the data analysis, this indicator included two questions that stated at number eight and number nine, the discussion based on the question number eight as followed; **what is your opinion about the English at your department**. 6 of students chose appropriate for the course because Mechanical Drawing learning English. Then, 7 of students chose enough appropriate for the course with the reason English learned was different with senior high school and there were use English in drawing. Next, 4 of students chose not appropriate for the course because the students do not learn English for technical yet. Last, 1 of students chose very not appropriate for the course with the reason the students did not learn English for technical yet. It defined that the English at Mechanical Drawing department enough appropriate because the students learned English in drawing.

Then, from the question no. 9, **how far is your understanding about English lesson**. The discussion as followed; 2 of the students chose well because they

understood, 3 of the students chose usual with the reason enough difficult in understanding English, 10 of the students chose less because they were not mastering the vocabulary and they did not understand English yet. Last, 3 of the students chose very less the students did not like English and they did not understand English yet. It could be concluded that the students' understanding about English was less because they had problem in mastering vocabulary.

b. Fit Into Present Knowledge

Referring to the result of the data analysis from this case involved two questions number ten and number thirteen, the question no. 10 was about **in English teaching and learning process, how about the teacher's explanation**. 14 of the students chose easy to be understood because the teacher was enjoyable, proficient in English and the material had been learned at previous school level. Then, none of the students chose very easy to be understood, 3 of the students chose difficult to be understood with the reason the students did not understand about English and 1 of the students chose very difficult to be understood because the student did not know the meaning. Based on the data, it could be concluded that the teacher's explanation was easy to be understood. Then, question no. 13 was about **how the level's assignment difficulty which given by teacher**. 5 of the students chose easy, with the reason the students could search in internet and they could did the assignment together. Next, 5 of the students chose difficult because they got difficult to understand English. Then, 5 of the students chose usual with the reason difficulty level depended on the material which given and the material repeated, 3 of the students chose very difficult because the students did not understand. It could be concluded that the assignment difficulty level which given by teacher was in categorize easy, difficult and usual with the reason because the students did together in group and could search in internet, it was difficult because

less understanding and it was usual because the material already repeated and still could be understood. It defined among these were balance.

c. **The Gap Between Target Situation and Existing Knowledge**

Based on the data analysis, this indicator stated at number eleven and number twelve, the discussion from question no. 11; **what is your problem in learning English.** The analysis were 8 of the students difficult in speaking with the reason the students had problem was difficult in speaking because they were not mastering the vocabulary and difficult in pronunciation. Then, 5 of the students difficult in reading because the students got problem in understood the meaning. Next, 2 of the students difficult in writing because the students wrote in English rarely and 3 of the students difficult in listening with the reason the students did not used to listen English. It could be concluded that the students' problem in learning English was speaking, because they less in vocabulary and pronunciation.

Then, from the question no. 12 was about **what is your problem in understanding English material.** 5 of the students difficult in understanding English text because the students less in vocabulary. Next, 6 of the students were not mastering vocabulary with the reason the students difficult to remember vocabulary. Then, 1 of the students were not mastering grammar because the student less in understanding sentence. Last, 6 of the students difficult in pronunciation because the students were difficult

3. Wants

a. **Objective Needs**

This case stated in questionnaire at the number fourteen, fifteen and sixteen. The question no. 14; **from four English skills, which one do you likes.** 3 of the students chose listening because it was important, easy and it was not complicated. Then, 4 of the students chose reading with the reason the students could read English fluently, reading could remind the material before,

enough easy to read and the students felt cool when speak English. Next, 3 of the students chose writing because the students like it, easy, and writing remind what the students had read. Last, 8 of the students chose speaking with the reason could speak English fluently. It defined that the students wanted speaking skill as the main point which the students' like.

Next, the discussion based on the question no.15; **in studying English, which English material that you want.** 4 of the students chose related to the Mechanical Drawing because it help to drawing in Auto Cad. Then, 6 of the students chose related to the daily activity with the reason it easy to remember, so the student could practice with others in daily activities. While, none of the students chose relate to the hot social issues. Last, 8 of the students chose referred to the working because the students expected it would help them in working field. It could be concluded that the students wanted the material that related to working because it would make the students easy came to industrial and help them in working.

Then, from the question no.16 was about **English material that I like.** 5 of the students chose dialogue in English with the reason speaking English was enjoy, cool and it could made the students' tongue speak English fluently. While none of the students who want to choose grammar. Then, 11 of the students chose learning vocabulary and pronunciation because the students could add their vocabulary and they could communicate fluently. Last, 2 of the students chose writing English text/ paragraph with the reason easy and enjoy. Based on the data analysis above, it could be concluded that the students liked English material related to the vocabulary and pronunciation because the students wanted to know about the vocabulary and they got English communication fluently.

b. **Subjective Needs**

While, the students wants that analyzed from the subjective needs stated at the question number seventeen, eighteen, nineteen, and twenty. The discussion as

followed:

Based on the question no. 17, **in studying English, you want to learn the English for.** 3 of the students chose daily activity because the students wanted speak in English as habit. Then, 1 of the students chose for last national examination with the reason the student got higher score. Next, 4 of the students chose for understanding the vocabulary which related to the Mechanical Drawing because it hope made the students understood English easily. Last, 10 of the students chose to support in working with the reason the students came to company easily and it help them in working. It defined that the students wanted studying English to support in working because they hoped it would support the students in working after they graduated from Mechanical Drawing department.

The discussion of question no. 18, **you like the English teacher teach by style.** 4 of the students chose give the book with the reason it was practice and better to study by used the book moreover the students could add vocabulary. Then, none of the students chose to give assignment. Next, 7 of the students chose explain the material because the students could understand easily. Last, 7 of the students asked the students to practice in front of the class with the reason to teach the students practice speaking English. It could be concluded that the students liked the teacher's style by explained the material and asked the students to practice in front of the class because the students more understood and taught the students to speak English therefore they had self-confident.

From the question no. 19 was about **what you want in studying English.** 5 of the students chose mastering the vocabulary about Mechanical Drawing with the reason the students expected it would help them in drawing machine, 1 of the students chose mastering grammar because if the students mastering grammar, all to be easily. Then, 11 of the students chose mastering English conversation because they could speak in English fluently. Last, 1 of the students chose just to know about English with the

reason the student did not like speak English. It defined that in studying English the students wanted to be master in English conversation.

Last the question no. 20 was about **what you want to get in studying English after graduate from your department.** 11 of the students chose could speak English well in working with the reason the students wanted they could speak English well in working after graduated from Mechanical Drawing because the students wanted to come in working easily. Then, 7 of the students to understand English technique in working because the student expected it could help them in working. While, none of the students chose continuous to study at college, and none of the students chose did not want to use English. It could be concluded that the students wanted they could speak English well in working after graduated from Mechanical Drawing department.

CONCLUSION

In this part, the researcher concludes that the result of this research refers to the data of students' need analysis that focus on students' necessities, lacks and wants on English learning material which had been done by researcher at the second grade of Mechanical Drawing department of SMKN 1 Padang. The researcher finds that the students need speaking skill as the main point that their necessities on English learning material because they need speak English fluently in order to help them in working field and the students need English learning material which easy to be understood, because the students have problems that they do not understand English yet and they are not mastering vocabulary and pronunciation. In conclusion, the students expect speak in English fluently to help them in working field after they graduate from Mechanical Drawing department.

SUGESTION

In this section, the researcher would like to give suggestion to support this research. Firstly, the teacher should evaluate English learning material which can support the students

more, especially for Vocational High School students. Thus, English that students learn will support the students in working field.

Then for the students, the researcher expects the students realizes their need on English learning material as Mechanical Drawing students. The students should understand English, thus it can help them in working field. Furthermore, the researcher expects for the reader to continue a new research about students' need analysis and also can develop the new idea about students' need analysis.

ACKNOWLEDGEMENT

A great thank goes to all students at vocational high school 1 Padang of this research who allowed the researcher to interview them and fill the questionnaires, so this research could be done.

REFERENCES

- Ahmed M. Channa. 2013. *A study of needs, problems and wants of using English of Engineering students at Quaid-e-Awam university of Engineering, Science and Technology, Pakistan*. Journal of Education and Practice, www.iiste.org, ISSN 2222-1735 (Paper) ISSN 2222-288X (Online), Vol.4, No.3
- Day J & Krzanowski M. 2011. *Teaching English for Specific Purposes: An Introduction*. Cambridge: Cambridge University Press.
- Gay L.R, Airasian P, & Mills, G. E. 2012. *Educational Research; Competencies for Analysis and Applications*. (10th Ed). New Jersey: Pearson Education.
- Jamal Md.Hossain. 2013. *ESP Needs Analysis for Engineering Students: A Learner Centered Approach*. Journal of PU: Presidency University. Issn: 2224-7610. Part: B Vol.2 No.2. Pp 16-26.
- Margarita P. October 2013. *Needs Analysis and Environment Analysis: Designing an ESP Curriculum for the Students of the Polytechnic University of Tirana*. Journal of Educational and Social Research MCSER Publishing, Rome-

Ital. ISSN 2239-978X ISSN 2240-052. Vol. 3 No. 7.

Mayuati, and Armilia Riza. 2013. *ESP Practitionaires' Roles at Vocational Sschol*. TELL – US Journal. Vol. 5, Issue 2, September 2019, P-ISSN: 2442-7608; E-ISSN: 2502-7468