

CHAPTER V

DISCUSSION

In this chapter, the researcher discussed the findings of the study covering students's perception on the target need, and students' perception on learning need percieved by mathematics students of State Islamic Institute of Tulungagung.

1. Target need perceived by mathematics students through learning English for mathematics

The discussion related to student's perception on the target need is interesting. What distinguishes ESP from General English is not the existance of a need as such but rather than an awereness of the need (Hutchinson 1987: 53). Target need is something of an umbrella term. To determine the destination in learning we have to know the target need. Target need include three kinds of need they are necessity, lack, and want. Necessity is what the learner has to know in order to make the target situation effectively. For example, a teacher might need to understand teaching strategy to help students understand the material deliveredby the teacher during the teaching and learning process. Lack is the gap between students' proficiency and the target of proficiency. Student wants deal with the student awareness of mathematicsstudent to learn the language (English).

In this research, necessities deal with the language used that needed by mathematics students to support their performance in the real field. Thus, the language use that needed by the students was related to the target situation, that were understanding some references written in English, preparing for TOEFL, and preparing themselves to the future. In term of understanding references, in this

situation they should be able to read and understand it as well as explain in Indonesian. While in term of preparing for future work, they should be able to compete. As stated in Hutchinson (1987:54) that the learner has to know the necessities in order to function effectively in the target situation. Thus, the necessities was affected by the target situation.

Lacks in this research, deal with the language used that needed by mathematics student in the target situation but it have not been studied before. To know the matematics students lacks, the researcher should be compared the necessities and the student prior knowledge in order to find out the gap of those two terms. Hutchinson, Waters and Breen (1979) stated that the gap between the necessity and prior knowledge can be refered as the learner's lacks (Hutchinson, 1987:56). From the data, the informants were explained about the mathematics students ability. Most of them have medium-low ability in English. Based on the result of interviews and questionnaires, the researcher assumed that it was the caused by their limitation of vocabulary and less practicing English. The students also found their lack in understanding matematics material which written in English because they were accustomed to translate it literalily, while vocabulary in mathematics should be interpreted in context meaning. From the that explanation, it can be conclude that the lacks were the student limitation of vocabulary and the lack of interpreting the material well. The importance of determine the students lacks was aimed to know whether the material that need to explain more.

Student wants, in this research deal with the student awareness of mathematics students to learn the language (English). In this case, the course designer were considered the necessities and the wants according to the learner idea. Mead's (1980) stated that considering the learner wants in the research cannot be ignored (in Hutchinson, 1987:57). From data apparent that most participant want to increase their ability especially in speaking skill followed by listening, reading, and writing. On the other side, the learner also stated they want to be more understand and familiar with English material so that they can understand some references comes from outside country well. So, researcher assumed that mathematics students in one side they want to develop their knowledge through understanding their material and also increase their proficiency as well as English student.

2. Learning need perceived by mathematics students through learning English for mathematics

Learning need deal with the knowledge and abilities that required by the student to perform the degree of competence in the target situation. Learning need were focused on the language that should be learnt according to the target need. Sometimes the materials related to the target need were not appropriate to the student interest in which caused by the lack of motivation to learn. Thus, learning need were important to used as a way to formulate the material according to the target need and the student need as a learner. It supported by Hutchinson and Waters (1983), that in teaching and learning process, it was better to look for the

material that are more interesting in order to generate the motivation needed to learn English (Hutchinson, 1987:61).

In response to the learning need perceived by Mathematics students through learning English for mathematics, this study will report the results and discuss under six parts consist of the learners' reason in taking the course, the way the learners learned, the resources availability, the learners' personal history, and the time and situation where the course took place.

From the research, the data obtained most students take the course because of obligation. Then through this course, students reveal they can improve their skill and it's apparently needed for the future. Moreover, the globalization and economy growth has demanded the job applicant to master English (Lieberman and Miller 2015). The lecturer point out English as foreign language that should be mastering by graduated students from State Islamic Institute of Tulungagung especially Faculty of Education and Teacher Training. The aim was to prepare students to compete in the field of work. Because nowadays, to apply for job, TOEFL usually needed. On the other side, this subject also prepared students to continue their next study for graduate programme.

The discussion related to the way the learners learned deals with students' perception toward teaching technique; the concept of teaching and learning, interesting teaching method, and alienating teaching method. From the data, researcher found that students were interest in having game using AVAs through teaching and learning process. Instructional media and technologies for learning can help provide a learning atmosphere in which students actively participate.

When instructional media and technology are used properly and creatively in the classroom, it is the machines that are turned on and off at will, not students (Robert 2002).

The participants reveal that they were dislike the learning and teaching process which only focuses on either the lecturer or students. In this case ESP lecturer were expected to guide the students without ommiting their main responsibility as a tutor who gave input for their students (Richard 2006). Any additional material could be given to attract students interest in learning and teaching process. Sometimes the materials related to the target need were not appropriate to the student interest in which caused by the lack of motivation to learn. Thus, learning need were important to used as a way to formulate the material according to the target need and the student need as a learner. It supported by Hutchinson and Waters (1983), that in teaching and learning process, it was better to look for the material that are more interesting in order to generate the motivation needed to learn English (Hutchinson, 1987:61).

The next aspect to be discussed is the resources availability. The resources availability in ESP [Teaching](#) covered the attitude of English lecturer, the material, and the AVAs (Hutchinson & Waters 1987). From the study, researcher found the students' responses related to the attitude of their lecturer were good. The data indicates that the lecturer has mastering the materials well and explain the materials clearly. In term of material, students explain that it was comprehensive and relevant to the learning. But, in contrary, students percieve that they did not feel the material used balance enough between theory and the application.

The learners' personal history would reveal students' history in learning English especially their major of study, interest in learning, and attitude to English as well as its culture (Hutchinson & Waters 1987). This study found that the informants actually were learn English for more than ten years. But as long as now, they are less in practicing English especially through daily communication and teaching learning process. They stated English was important but also difficult subject. The researcher also found that participant stated that English culture was interesting but only a few which can be applied through daily life as Indonesian.

Mathematics students are required to take the English courses for three times, in the first semester, second semester, and fourth semester. Each course is taught for two hours per week. Since this major focuses on mathematic content courses, English is taught as an additional subject only to support their learning. This study found that the participants considered the two hours of meeting for each English course was enough. Two hours for each week is same with the material has two credit (2 SKS). This study found that participant consider that two hours for each week was enough. Beside that the learning environment was comfortable enough to support them in learning process.