

CHAPTER IV

FINDINGS AND DISCUSSIONS

A. FINDINGS

This data presentation describes about result of research on the observation sheet, interview and documentary result as the primary data to better understand about teacher's techniques in teaching English at Mathematics Department, to know the teacher's techniques in teaching English at Mathematics Department.

1. Description about Techniques Used in Teaching English in Mathematics Department at IAIN Antasari Banjarmasin

To know about the techniques are used by the teachers in teaching English, the writer conducted observation 4 times on October, 10th, 19th, 25th, and 27th 2016. There are four classes A, B, C, D, especially in seventh semester at Mathematics Department who took English subject. Mathematics Department has one teacher who taught English in seventh semester.

Based on observation and interview result, this is the first he taught English course in this University, but he ever taught English course in other University. The writer observed the kind of teacher's techniques when teaching English at Mathematics department. The writer also checked the steps that the teacher used in teaching English for Mathematics students by using observation sheet.

Actually, the writer knew the teacher's techniques from the teaching and learning process which has been done by the teacher. In teaching and learning

process the teacher used English, but sometime he used Indonesian. The writer observed 4 times, with the following details:

Table 4.1 list of observation

NO	Date	Class	Teaching Material
1.	Mon / October 10, 2016	C	Rounding to Estimate
2.	Wed / October 19, 2016	B	Supplementary number problem
3.	Thu / October 25, 2016	D	Time, Rate and Distance
4.	Tue/ October 27, 2016	A	Time, Rate and Distance

The detail of the observation that the writer did in teaching and learning process at the seventh semester of Mathematics department at IAIN Antasari Banjarmasin can be seen as in the appendix. Yet, during the observation, the writer found that the teacher used some various techniques when teaching English at four classes ; A, B, C, and D.

Based on the observation and interview, kind of techniques that the teacher uses are: *Translation of Literary passage, reading aloud, question and answer exercise, teacher's silence, peer correction, and authentic materials*. After the writer did observation and interview, the writer found the main material which is collected by teacher from some books that made a module in teaching English. The contents of the book is mainly about Mathematics in English. The list of observation in the class room can be seen in the following table 4.2.

Table 4.2. Techniques are applied by in teaching English for mathematics department

No.	Day/Date	Teacher's Techniques
1	Monday, October 10 th , 2016	Question and Answer Exercise, Teacher's Silence, Peer Correction, Authentic Material
2	Wednesday, October 19 th , 2016	Translation of A Literary Passage, Question and Answer Exercise, Teacher's Silence, Peer Correction, Authentic Material
3	Thursday, October 25 th , 2016	Translation of A Literary Passage, Reading Aloud, Authentic Material
4	Tuesday, October 27 th , 2016	Translation of Literacy Passage, Authentic Material, Reading Aloud

Based on the result of four observations and interview by the writer, this table describes that the teacher uses multiple teaching techniques for each meeting, this can be explained as follows:

The first observation was conducted class C on Monday, October 10th, 2016. The English teacher taught about rounding to estimate. In the meeting, the skill was writing. The teacher did some activities such as: The teacher review about percentages, he showed a video, he asked the students came in front of the class to work on the problems, then corrected it together.

The second observation was conducted class B on Wednesday, October 19th, 2016. During the observation, the teacher did some activities, such as: The teacher asked students to translate about supplementary number problem, then he explained the translated about supplementary number problem by parse it on the whiteboard. Furthermore, he asked some students to answer some problem and wrote it on the whiteboard, then asks the other students to check over the answer.

Based on the third observation class D on Thursday, October 25th, 2016. The material is time, rate and distance. The writer found the teacher's activities were: Teacher asked students to translate word problems related to time, rate and distance orderly, and asked some of the student to explain it. First, he asked students to translate word problems related to time, rate and distance alternately. Then, he asked some of the student to explain it. The teacher wrote the sentence on the whiteboard and the translations in Indonesian besides the sentence.

Based on the last observation which was conducted class A on Tuesday, October 27nd, 2016, the students learnt about time, rate and distance. From the observation, the writer found some activities, such as: First, the teacher asked students to translate. Then, after students translated the problem, the teacher asked student to read the translation loudly. The last, the teacher asked some students "why don't you write the translation?", then give homework.

2. The Application of Techniques in Teaching English for Mathematics Department

The detail observation about English teaching and learning process for Mathematics department at the seventh semester of IAIN Antasari Banjarmasin can be seen in the appendix.

a. First Meeting

Based on the observation, the English teaching and learning process at class C of seventh semester of Mathematics department at IAIN Antasari Banjarmasin were those in the following description:

1) Pre Activity

In pre activity, the teacher greeted the students and checked the attendance. The activities were: The teacher opened the class by saying *salam*. Then, he gave regards students by small talking “*good morning!*”, “*how are you today?*”. After that, he checked the attendance. Furthermore, he prepare the media (LCD and module).

2) While Activity

In while activity, the teacher taught the topic about rounding to estimate. The activities included: The teacher asked about homework. Then, he asked students came in front of the class to do homework. When students doing it, the teacher’s silence. If the students didn’t understand about the problem, the teacher approach the student to explain it. After that, he checked the answer in front of the class that the student worked earlier, and then ask “*is’t correct?*”.

Furthermore, he showed a video about rounding to estimate. “ Look at this video about rounding to estimate!” Then, he asked students to pay attention. After that, he gave problem about percentages and asked student answer in front of the class. He explain student’s answer and ask “*any question for percentages?*”. Next about statistics, “*are you remember about sample?*”. Moreover, the teacher showed power point about *mean, median, modus* and review it.

3) Post Activity

Based on the observation, the writer found the activities that the teacher emphasized the students to remember the lesson. He did not forget to give the

students opportunity to ask some questions and made sure they understand about the lesson. The last, the teacher closed the meeting by saying *Salam*.

b. Second Meeting

Based on the observation, it can be seen that English teaching and learning process at class B of seventh semester of IAIN Antasari Banjarmasin was that:

1) Pre Activity

In pre activity, the teacher greeted the students and checked their attendance. The activities were: the teacher opened the class by saying *salam*. Then, he gave regards students by small talking “*good afternoon!*”, “*how are you today?*”. After that, the teacher checked the students’ attendances. Next, the teacher asked about previous lesson and checked students’ memorization about the lesson. Then, the teacher prepare media (module and LCD).

2) While Activity

In while activity, the teacher taught the topic about algebra especially supplementary number problem. The teacher’s activities were: The teacher give a problem about supplementary number problem, then he asked students to translating it in Indonesia orderly. After that, the teacher discussed it on the whiteboard and he explains the problem. Then, he made sure whether students have any question or not.

Furthermore, the teacher asked student to do exercise. When students did, the teacher just kept silence, but student could ask him if they do not understand about the exercise. After a few minutes, the teacher ask student to submit the

exercise. Then, he asks students in front of the class to do exercise orderly. Done corrective student's answer, he ask student "isn't correct?".

3) Post Activity

Based on the observation, the writer found the activities that the teacher ask some student whom be able zero score in front of the class. Then, he asks why they are acquiring this score. After that, he was closing the lesson by saying "*salam*".

c. Third Meeting

Based on the observation, it can be seen that English teaching and learning process at class D of seventh semester of IAIN Antasari Banjarmasin was that:

1) Pre Activity

In pre activity, the teacher greeted the students and checked the attendance. The activities were: The teacher opened the class by saying *salam*. Then, he gave regards students by small talking "good afternoon!", "how are you today?". After that, she checked the attendance. Furthermore, he prepare the media (LCD and module).

2) While Activity

In while activity, the teacher taught the topic about date, time and distance. The teacher's activities were: The teacher asked the student to translate a problem about date, time and distance orderly, then he asked some of student to answer it on whiteboard. After some of students answer a problem about date, time and

distance, he asks the student to explain it. Afterthat, the teacher asks another student to read the translating loudly.

3) Post Activity

Based on the observation, the writer found the activities that the teacher emphasized the students to remember the lesson. He did not forget to give the students opportunity to ask some questions and made sure they understand about the lesson. The last, the teacher closed the meeting by saying "*Salam*".

d. Fourth Meeting

Based on the observation, it can be seen that English teaching and learning process at class A of seventh semester of IAIN Antasari Banjarmasin. The activities can be described as follows:

1) Pre Activity

In pre activity, the teacher greeted the students and checked the attendance. The activities were: The teacher opened the class by saying *salam*. Then, he gave regards students by small talking "good afternoon!", "how are you today?". After that, she checked the attendance. Furthermore, he prepare the media (LCD and module).

2) While Activity

In while activity, the teacher taught the topic about time, rate and distance. The teacher's activities were: after start the lesson, the teacher asks homework last week and submit it. Then, he asks students to translate a problem about time, rate and distance. However, before translate a problem, he gave suggestion for the

students; he said “because we are not English department, so we try to translate without follows the structures as long as the meaning is the same or not deviate”.

Furthermore, the teacher asks student to read loudly the translation orderly. After completion translates orderly, the teacher asks anyone who did not make a note of the translation result and gave advice to students who did not take a note it so as not repeat them, so that they are always noted the lesson in every meeting.

3) Post Activity

Based on the observation, the writer found the activities that the teacher emphasized the students to remember the lesson. He did not forget to give the students opportunity to ask some questions and made sure they understand about the lesson. Before the teacher close the lesson, he gives homework about time, rate and distance. The last, the teacher closed the meeting by saying “*Salam*”.

3. The Problem Were faced by the teacher in Teaching English for Mathematics Department at IAIN Antasari Banjarmasin

Based on the interview on Wednesday 16th, 2016 and observation, the writer has found that the English teacher at Mathematics department had a problem in teaching English for the mathematics students at seventh semester. Further description, these are some description about the problems were faced by the teacher:

During the observation, the writer found some problems. The problem is from teacher. First, the teacher is not from English education, so the teacher has

difficulties to understand the students about the topic, so one topic can be several meeting.

It was proved by some interviews with the teacher about the problems which were faced in teaching English for Mathematics students. Based on the interview with the teacher, there were some questions. The writer asked about, “What the problems when teaching the Mathematics students?” The teacher answered, “The problem not a big of troubles, I am difficult to make understanding a few students to translate a problem in form English into Indonesia.

In fact, a matter about which they translate still in the level Junior High School or Senior High School, for example about algebra but algebra in this course not only study algebra long away but also just translate a problem in form English into Indonesia. Yet, they are difficult to translate and understand because they are not majoring in English. The teacher should repeat the lesson more than one time because the students difficult translating and understand the lesson quickly. Because the topic is not completed in a one meeting, so the next meeting is still the same topic.

Teacher tends to speak Indonesia to avoid student’s problem in English and he also should repeat the lesson more than one time because the students have difficulties in translating and understanding the lesson quickly. Because the topic is not completed in a one meeting, so the next meeting is still the same topic. Although, they are not from English education, but they should learnt English

because the goal of this course is they can made a lesson plan of Mathematics in form English and can teach in international school.

B. DISCUSSIONS

The data which have been collected from the observation, interview, and documentary are presented in findings. Then, the data are analyzed and reported systematically based on the statement of problem which are about teacher's techniques in teaching English for Mathematics department, the applications of the techniques, and the problems were faced by the teacher in teaching English at the seventh semester of Mathematics department at IAIN Antasari Banjarmasin. For further description, it is known from analysis below.

1. The Kinds of Techniques are Applied in Teaching English for Mathematics Students

Based on the observation, the teacher used some techniques in teaching English, such as Translation of Literary passage, reading aloud, question and answer exercise, teacher's silence, peer correction, and authentic materials.

It is known from the observation, the teacher used translation of literary passage because he did some ways of using the technique. The teacher gave a matter about the lesson, then he asks students to translate it orderly. Translation of literary passage is often used was also used by the teacher in 2nd, 3rd, and 4th meetings. The teacher used this technique by translating a reading passage into Indonesian. According to Freeman (2002 : 19), students translate a reading

passage from the target language into their native language, it provided focus on vocabulary and grammatical structures. This technique was used in order students can understand the meaning.

The teacher also uses reading aloud in teaching English. According to Freeman (2000 : 30), in reading aloud, students take turns reading sections of passage, play, or dialog out loud. The teacher used this technique by asking students to read a reading passage in the 3rd and 4th meeting.

Question and answer exercise also was involved in the teaching and learning process. The teacher asked students to answer the question that they translated, then they could ask a question with the teacher if they did not understand. According to Freeman (2000 : 30), this exercise is conducted only in the target language. Students are asked questions and answer in full sentences so that they practice new words and grammatical structures. They have the opportunity to ask questions as well as answer them.

In the every meeting, the teacher used teacher silence. He asked students to do exercise. When they are doing it, he keep silent and then explain if the students ask. According to Freeman (2000 : 68) teacher's silence is the teacher gives just as much help as it necessary and then is silent. The teacher sets up an unambiguous situation, puts a language structure into circulation, and then is silent. Even in error correction, the teacher will only supply a verbal answer as a last resort.

The teacher also use peer correction in teaching English. According to Freeman (2000 : 68), students are encouraged to help another when he or she is

experiencing difficulty. It is important that any help be offered in a cooperative manner, not a competitive one. The teacher monitors the aid so that it is helpful, not interfering. The teacher use this technique in the 1st and 2nd meeting by asking some of student to answer the question on the whiteboard, then he ask another student to correction it.

In every meeting, the teacher used authentic material. He shows Microsoft word on LCD about the topic. According to Freeman (2000 : 132) , teacher uses a real target language newspaper article. Teacher also assigns the students' homework, requiring that they listen to a live radio or television broadcast. It is suggested only for high intermediate level of proficiency.

Those are some techniques which were used by the English teacher. The teacher used various techniques to make class more attractive. According to Peter Master in the book *Responses to English for Specific purposes "ESP"* :

First step when there is no time for planning is to follow the current trends in ESP and concentrate on the teaching of study skills for the overall comprehension of reading materials. In mathematics, ideal reading passages are those concerning the general and historical aspects of the subject, which make it possible to carry out activities involving anticipation and prediction, the recognition and recall of specific details, the identification of discourse markers that make relationships between ideas more explicit, and so on.

The second and more challenging stage in the ESP course, reading approach may no longer be useful at this point since ; (1) students can read the mathematics of most textbooks regardless of the language in which they were written, and (2)

ideas respond to rules of logical inference and they cannot to be simply described as general, main, and supporting.

2. The Application of Techniques in Teaching English for Mathematics Students

Based on the research result from observation, it can be known that the teacher used some techniques in English teaching and learning process. The activities can be divided into three parts; pre activity, while activity, and post activity. It can be indicated that the teacher used techniques during a whole of teaching and learning process.

There are three activities which the teacher did, they are:

a. Pre Activity

This activity for warming up and make sure that the students were ready to study. Based on the observation from 1st to 4th meeting, it was found that the teacher greeted students, and checked students' attendance . Sometimes, he also asked about the previous lesson to check students' attention for the lesson. The teacher did warming up activity before come in the material.

Warming up is one of the important aspect in teaching. According to Robertson and Acklam (2000), warming up is a short activity for the beginning of lesson. It engages the students and gets them using English from the start. The activity will help the teacher to engage the students' interest and motivation. Kay (1995) claims that warms up are different types of activities which help the students begin to think in English, review previously introduced materials, and

become interested in the lesson (as cited in Velandia, p.11). the activities can be formed such as motivation for students, small talking about the condition at the day, asking the previous lesson, and trying to make the next lesson interesting.

In some observations, the teacher often asked about previous lesson that they have learnt. He was successful to interest the students' attention in the first activity.

b. While Activity

Based on the observation, in while activity, the teacher taught some materials, such as writing text and video. On the 1st meeting, the teacher asked about homework. Then, he asked students came in front of the class to do homework. When students doing it, the teacher's silence. If the students didn't understand about the problem, the teacher approach the student to explain it (teacher's silence). After that, he checked the answer in front of the class that the student worked earlier, and then ask "*is't correct?*". (peer correction)

Furthermore, he showed a video about rounding to estimate (authentic material). " Look at this video about rounding to estimate!" Then, he asked students to pay attention. After that, he gave problem about percentages and asked student answer in front of the class (question and answer exercise). He explain student's answer and ask "*any question for percentages?*". Next about statistics, "*are you remember about sample?*". Moreover, the teacher showed power point about *mean, median, modus* and review it.

On the 2nd meeting, the teacher give a problem about supplementary number problem on LCD (authentic material), then he asked students to translating it in

Indonesia orderly (translation of a literary passage). After that, the teacher discussed it on the whiteboard and he explains the problem. Then, he made sure whether students have any question or not.

Furthermore, the teacher asked student to do exercise (question and answer exercise). When students did, the teacher just kept silence, but student could ask him if they do not understand about the exercise (teacher's silence). After a few minutes, the teacher ask student to submit the exercise. Then, he asks students in front of the class to do exercise orderly. Done corrective student's answer, he ask student "isn't correct?" (peer correction).

On the 3rd, the teacher show the problem on LCD (authentic material). Then, he asked the student to translate a problem about date, time and distance orderly (translation of a literary passage), then he asked some of student to answer it on whiteboard. After some of students answer a problem about date, time and distance, he asks the student to explain it. Afterthat, the teacher asks another student to read the translating loudly.

On the 4th meeting, the teacher asks students to translate a problem about time, rate and distance that show on LCD (translation of a literay passage and authentic material). However, before translate a problem, he gave suggestion for the students; he said "because we are not English department, so we try to translate without follows the structures as long as the meaning is the same or not deviate".

Furthermore, the teacher asks student to read loudly the translation orderly (reading aloud). After completion translates orderly, the teacher asks anyone who

did not make a note of the translation result and gave advice to students who did not take a note it so as not repeat them, so that they are always noted the lesson in every meeting.

c. Post Activity

By the end of the lesson, the teacher checked the students' understanding about the lesson. He asked the material that the students learnt before. Robertson and Acklam (2000) states that It is important when ending lesson that the students have some sense ac achievement. Some teachers often give a recap of the subject at the day by Highlighting again the main point-directly or through elicitation. This is a good way to consolidate the language point and give the students a clear sense of what they have accomplished.

So, from the activities which are used by the teacher, it can be concluded that English teaching and learning process at the seventh semester of Mathematics department is good category because the teacher have done some steps or activities for applying the techniques.

3. The Problem Were Faced by The Teacher in Teaching English for Mathematics Students

During the observation, the writer found some problems. The problem is from teacher. First, the teacher is not from English education, so the teacher has difficulties to understand a few students about the topic, so one topic can be several meeting.

It was proved by some interviews with the teacher about the problems which were faced in teaching English for Mathematics students. Based on the interview with the teacher, there were some questions. The writer asked about, “What the problems when teaching the Mathematics students?” The teacher answered, “The problem not a big of troubles, I am difficult to make a few students understanding to translate a problem in form English into Indonesia.

In fact, a matter about which they translate still in the level Junior High School or Senior High School, for example about algebra but algebra in this course not only study algebra long away but also just translate a problem in form English into Indonesia. Yet, they are difficult to translate and understand because they are not majoring in English. The teacher should repeat the lesson more than one time because the students difficult translating and understand the lesson quickly. Because the topic is not completed in a one meeting, so the next meeting was still the same topic.

Teacher tends to speak Indonesia to avoid student’s problem in English and he also should repeat the lesson more than one time because a few students difficult translating and understanding the lesson quickly. Because the topic is not completed in a one meeting, so the next meeting is still the same topic. Although, they not from English education, but they should learnt English because the goal of this course is they can made a lesson plan of Mathematics in form English and can taught in international school.