

CHAPTER III

RESEARCH METHOD

This chapter gives information about how this research was conducted. It includes explanations on the action research design, the subject of the action research, the action research setting, place and time, the steps of action research, the instruments and data collection techniques, data analysis process as well as the validity and reliability used under the study.

A. Design of the Action Research

This study is a classroom action research. Action research is a form of self-reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social and educational practice, as well as their understanding of these practices and the situations in which practices are carried out (Kemmis and Mc Taggart in Mc Niff, 1991: 24). As it is done in a certain setting, the researcher should be able to understand the characteristics of the setting researcher might work in.

It is aimed to implement the metacognitive strategy to improve the students' ability on reading comprehension. Madya, (2007: 26) states that action research operated as intended for increasing the quality of the students in the class. The quality means that through the process of teaching action which was conducted by the teacher, the ability from the students are able to increase. The Action Research has been defined in a number of different

ways. Kemmis and McTaggart (1988:6), for example, argued that the three defining characteristics of action research are that it is carried out by practitioners (for our purposes, classroom teachers) rather than outside researchers: secondly, that it is collaborative; and thirdly, that it is aimed at changing things. A distinctive feature of action research is that those affected by planned changes have the primary responsibility for deciding on courses of critically informed action which seem likely to lead the improvement, and for evaluating the results of strategies tried out in practice. Action research is a group activity.

In addition, according to Kemmis and Mc Taggart (1990 as cited in Hopkins, 2011) action research is also called the self-inquiry that is developed by a person who wants to improve his or her social or educational practices by evaluating his or her own practices. In other words, action research can be said as the self-reflective cycles which include the process of planning, acting, observing, reflecting, re-planning, acting, observing, and so on; the researcher is also playing the role as the planner, doer, observer, and the one who reflects the actions as well.

For getting the data, I needed to employ open-ended questionnaires, observations, semi-guided interviews, and revisable cycles, this research tried to improve students' reading comprehension in the teaching and learning process. Thus, the data were collected in the form of questionnaires, interview transcripts, observation checklists, field notes, and the reports of the test result. Those collected data were used as sources for the evaluation and

reflection so that the researcher could revise the plan to be the more effective one.

There are four steps that were developed in this research. They were planning, action, observation, and reflection. As this research is participatory and collaborative, therefore the design of this research will adopt the theory suggested by Kemmis and Mc. Taggart.

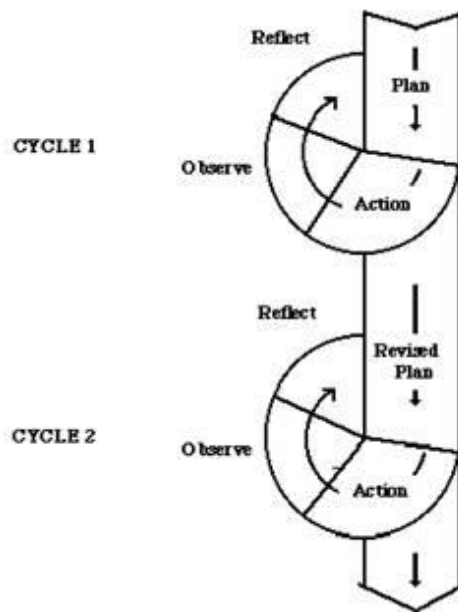


Figure 4. Action Research modeled by Kemmis and McTaggart

Further, Madya (2007:102) viewed more details on steps of an action research. They are: (1) identifying and formulation the problems; (2) analyzing the problem; (3) making hypothesis; (4) planning actions and monitorings; (5) doing action and observing; (6) analyzing and interpreting the data; and (7) reporting. I wrote the identification of the problem from my observation of collaborator vignette on Monday, February, 20th, 2017. This identification was very important as a based ways to continue the next step. Referred to Madya's, after I have done

with the identification of the problem, I was doing formulation of the problem. Referring from madya's steps above, the seven steps were taken to enhance the students' reading comprehension through metacognitive strategy. The identification and formulation of the problems were taken from some early reflections. I have observed of the problems as a first vignette.

After doing observation of the class and writing the identification and formulation of the problem, I need to analyzing of the problems. Sometimes, in to other research, the data analysis in action research aimed not to generalize, but to obtain evidence of certainty whether there was improvement, and/or change as expected. This is because the issues raised in the action research are casuistic, meaning that the specific problem occurred and faced by the teacher who did the action research and the alternative problem solving has done, would not necessarily give the same results for similar cases. Therefore, when an action of research succeeded in showing the improvement and/or change as expected, it means that the researcher (teacher) has succeeded in finding the model and procedure of action that give guarantee to the effort of solving the problem.

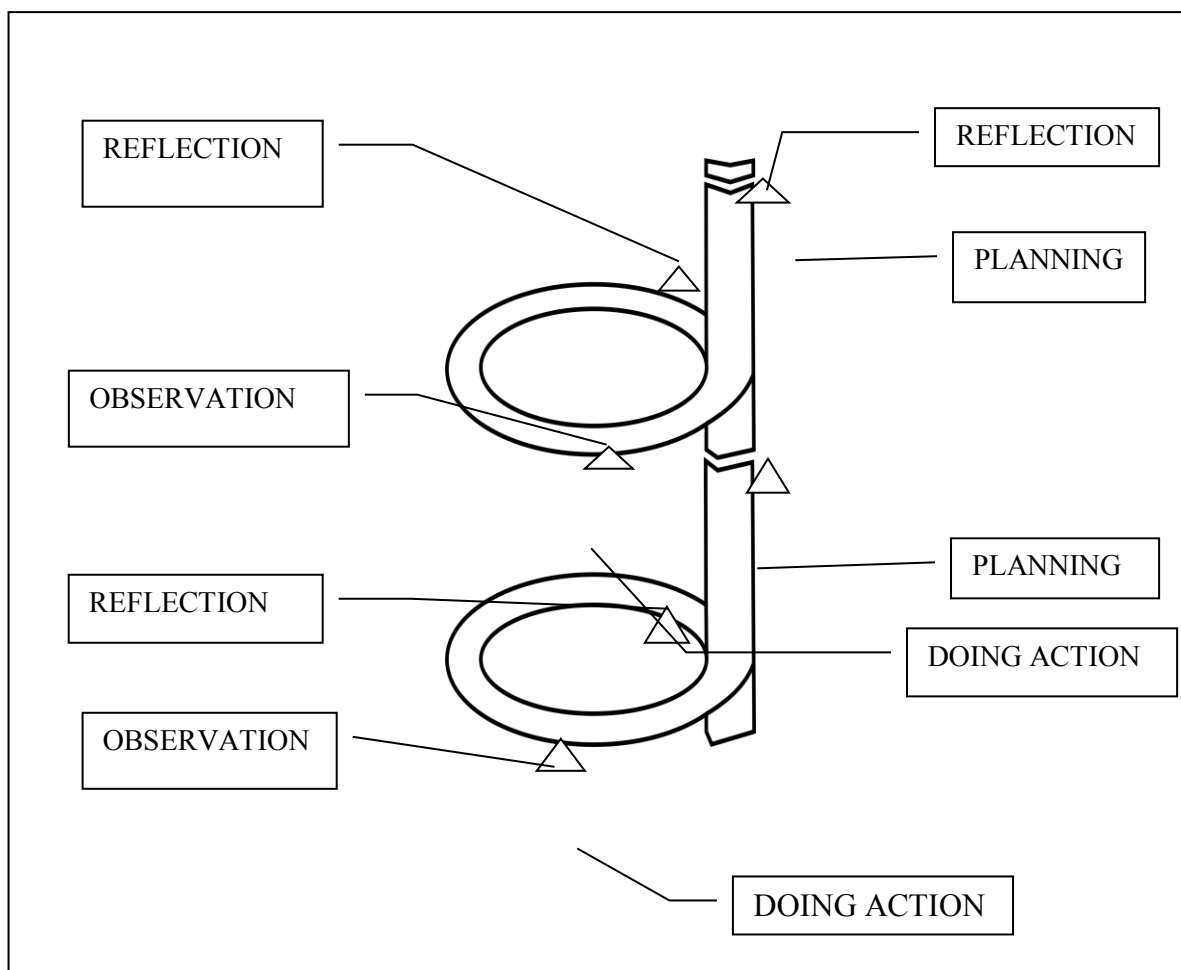


Figure 5. Basic Process of Action Research (Madya, 2007: 67)

B. Subject of the Research

The main subjects of this study were students of IPS 2, SMA Muhammadiyah 1 Yogyakarta who were in grade XI semester 2 by the academic year of 2016/2017. They were students in class social 2 in the second semester of their study. This class was chosen as the subject because based on the previous observation, the students in this class experienced some problems in learning English. One of the problems in which dealt with the reading comprehension.

C. The Target Community Setting

The setting of this research is SMA Muhammadiyah 1 Yogyakarta that is located in Kota Yogyakarta. This school has 33 classrooms, one teachers' room, one room for the school principal's office, laboratories for languages, laboratories for science, laboratories for social program, and one for the official administration. It also has a mini bank, a mosque, basketball court, badminton court, a gymnasium, tennis courts, cafes, toilets, parking areas, and a library. For the 1170 students, 83 teachers and 23 staff, these facilities give them a great deal of contribution to the teaching and learning process.

Besides, what the researcher found to be special from this school is that all of the students have to read the Holy Al Qur'an in the first 10 minutes of the day or at 07:00-07:15 every day. This is considered by the teachers to be a good starting point before they have their activities along the day.

In this school, English is taught in 2 x 45 minutes per week. The students are permitted to use the books available in the library with the permission of the teacher while having class with her. Moreover, this school also has extracurricular activities such as Scout, Basketball, Journalistic, Japanese, English Debating Program, Muhi English Magazines, Radio Broadcasting, Music band, Vocal group, Theater, and so on. While dealing with the class of Marketing 2, the 35 students in this class are females.

During the English classes, the students usually listen to the teacher's explanation, work on the exercises given, discuss the answers, and so on. The materials given in the English classes are sometimes unrelated with the standard

of content developed by the Ministry of National Education. For examples, one of the materials are something about sentence structure, reading texts taken from *Jakarta Post* that are designed with some questions on the sentence structure of the sentences from the text. Thus, there is less proportion on the reading comprehension to learn.

D. Place and Time of the Research

This research was done in SMA Muhammadiyah 1 Yogyakarta with the XI grade students in Social 2 class as the participants. They were those who were in the first semester by the academic year of 2016/2017.

The research was carried out during the English class which is held twice a week in each class. For this class (XI Social 2), the scheduled classes were on Monday and Wednesday at 07:15 until 14.15 p.m. (seven hours). The actions lasted in 2x45 minutes per meeting from March until May 2017.

E. Procedures/Steps of the Action Research

a. Cycle 1

In the planning stage of Cycle 1, the initial problem of the participants of this study was identified by using a casual interview which was conducted by the English teacher of the second grade and preliminary observation. The interview and preliminary observation identified that students often face difficulties in comprehending the text as whole. In order to cope with those obstacles, there was an effort to implement metacognitive strategy in enhancing the students' reading

comprehension particularly narrative texts. Since this strategy provides the progress of information to control “the outcome of any attempt to solve a problem, planning one’s next move, monitoring the effectiveness of any attempted action, testing, revising, and evaluating one’s strategies for learning” (Salataci & Akyel, 2002, 2)

1. Planning

Research planning is the first step which must be done by the researcher. This activity is well organized; in addition, the concept needed in this research has also planned perfectly for the dedicated action. This research planning will cover two considerations as suggested by Madya (2007:58). First, the action in which considerate the risk happened in the social exchange and admit that there will be real constrains both in the form of materially and politically related to the context. Second, the action has considered that it will be possible for the students to be more effective in all conditions wisely and carefully.

Having done the planning activity, it was expected that the research was more easily conducted so that the problem which occurred in the field would be covered successfully. In this step, the researcher focused on 1) how the students involved in the learning process, 2) how the students reacted in facing new English text, 3) how the teacher helped the students to understand the content of the text, and 4) how the teacher motivated the students in interaction with the message of the text.

The result of the planning noted by the researcher then carefully identified and finally, the problem appeared would be overcome to enhance the excess of the class. Based on the researcher and the collaborator agreement, all the things concerned in the field will be used to be the guideline of the action.

I have made this planning activities with metacognitive strategy learning for enhancing reading comprehension. Based on the three skills of Jacob (1978) for metacognitive regulation:

- a. Pre - reading

2. Action

The action research is meant as the awareness and controlled action. It means that the action in which done by the researcher is innovative that differs from commonly activity done on the previously. The main purpose of the action is for improving the students' ability on reading comprehension.

The action is guided by the planning. It means that the researcher will do the action with the boundary of the result of the planning. Yet, the action is not totally ruled by the planning. It is possible to be changed as the condition of the class. Thus, actions should be flexible and tentative. The modification of the action should be considered for there will be a possibility of change in condition in the field caused by its demand.

In regards with the effort to improve the student ability in reading comprehension, therefore this action was done in the reading class. With assumption that by using the real text, the students would be more motivated.

3. Observation

The function of observation is to portrait the effect of action that has been done in the classroom. The orientation of observation is for the future. It means that observation as the foundation for the next activity that is 'reflection'. The observation is truly needed in the process as it was used as the guideline. Considering the action very depended on the condition of the class and it was be limited by the class reality thus observation must be well organized.

The following are the aspects in which the observation covered: (1) how is the process of the action? (2) what is the effect of the action, (3) how is the classroom condition and what are the obstacle happened during the action?, (4) how to overcome the other problems occurred during the action. The four aspects have been chosen by the researcher as cited from Madya, (2007:63).

Adapted from Nelson & Narens,1990, and their corresponding definitions are presented by Dunlosky, Serra & baker, 2007, judged the context of a standard procedure for metamory considered of the basic memory components of the research method, which involve acquisition (study), and retrieval (test).

4. Reflection

Having done the three steps, reflection was the further step that must be considered by the researcher. The purpose of the reflection session is for remembering and mediating all the actions in the classroom. The reflection tries to discuss all the findings in the class-activities during the action. It is held by the researcher and the collaborator.

Having done the discussion session between researcher and collaborator, it is expected to create reconstruction of the meaning in social situation and giving the basic improvement. Madya (2007:64) states that reflection has evaluative aspect. It means that the reflection session forces the researcher to think again and again of what the action done by him/her. It is time to think about whether what the researcher target has already achieved or not. The suggestions are also necessarily for making any judgment. In addition, reflection can be understood as descriptive. It is the effort to describe to all the action happened in the class.

b. Cycle 2

1. Planning

In the planning session of this cycle, the researcher reviewed the result of the discussion and planned the teaching techniques to solve the problems appearing at the first cycle.

2. Action and Observation Cycle 2

As what the researcher did in the second stage of the first cycle, in this stage the researcher implemented the revision of the metacognitive strategy decided in the planning session, and observed its progress. The mistakes, weaknesses, changes and improvements were discussed and written as a consideration to draw the conclusion about the whole teaching and learning process.

3. Reflection 2

In this stage, the implementation and observation of the Cycle 2 were reflected in the discussion between the researcher, and the collaborator. Furthermore, the whole problems, solutions, changes and improvements made in the Cycle 1 and Cycle 2 were discussed to draw the conclusion about the overall teaching and learning process.

1) Action and observation

These research actions were carried out in two cycles. Each cycle was done in two months. In the action stage, the lesson plans and the materials and other teaching media were used in the classroom. In this stage, the English teacher of grade XI IPS 2 SMA Muhammadiyah 1 Yogyakarta acted as the collaborator, while the researcher acted as the action taker, students acted as the subjects of learning.

In this stage, the plans were carried out in the classroom. Besides, the researcher also made some changes and revisions in the use of metacognitive strategy and the grouping techniques as solutions of the problems. The implementation of the teaching and learning process was observed by collaborator to give the researcher feedbacks on her teaching techniques.

3) Reflection

Since this research was done collaboratively, the reflection session was carried out collaboratively too. It means that the research team came to the deep thinking on how to improve the effectiveness of the teaching-learning process so

that the improvement desired by the researcher and the collaborator can be achieved. The reflection session was expected to be useful in revising the plan and actions so that the efforts could be done in a better way.

The evaluations were done in three ways, the first was short term evaluation which was done in every meeting and the second one was long term evaluation which was done in every cycle, and the last one was the evaluation of the overall practices which was done in the end of Cycle 2. The evaluations involved the researcher and the collaborator.

F. Instruments and Data Collection Techniques

1. Observation

Observations of the implementation of the teaching and learning process provide useful information. According to Kutner et al (2007:28), there are two types of observations: structured and unstructured. Structured observations, which use systematic observation and a coding instrument, narrow the focus of the observation and provide data on specific instructional behavior. Items on a checklist, for example, can be related to the specific skills and knowledge addressed in the classroom activities, the students' behaviors, and the teachers' instructions. Unstructured observations, in which the observer viewed the overall classroom and assessed a wide variety of teaching behaviors, provide general information about instructional practice and student responses, and are informative when used in conjunction with teacher interviews (Kutner et al, 2007: 28).

There are various observation techniques that can be applied in the classroom setting. Some of those techniques provide a detailed description of what is occurring in the classroom. They include running transcripts, grids, tally sheets, lesson plans, time notation, dialogue recording, and videotapes. The observation data can be useful in giving the teacher feedbacks on his/her instructions. Observations also validates information collected through teacher interviews.

In this research, the researcher applied structured observation by using observation checklists in each meeting to focus on the information about the teacher's instruction, the students' behavior, and the classroom situation. Furthermore, field notes were used to gather information about the teaching and learning process in general as one of the unstructured observation techniques. The following is an example of field note taken in the second meeting of Cycle 1.

While for the structured observation, the observation checklists were used in every meeting. The sample of the observation checklists taken from the data is presented in the following page.

2. Interview

Interviews can be valuable evaluation instruments, as they provide, with the interviewer's ability to probe for answers, more in-depth information than do questionnaires (Kutner et al, 2007:25). Interviews can be done with or without guidelines. However, guidelines may help the interviewer to focus the

conversation on several items or data needed in the study. The questions may include both close-ended and open-ended questions.

This observation checklist below aimed to help the collaborator for knowing the enhancing reading comprehension using metacognitive strategy:

Observation Checklist

Date : February 7th, 2017

Meeting : 1

Check each item in the column that most clearly represents your observation.

No	Observation Items	Observation score				
		0	1	2	3	4
I	The Teaching and Learning Process					
A	Pre-teaching (Planning)					
	1. The teacher greet the students			v		
	2. The students respond to the greeting				v	
	3. The teacher asks the students' condition				v	
	4. The students tell their condition to the teacher				v	
	5. The teacher calls the roll			v		
	6. The teacher outlines the materials			v		
	7. Th eteacher tells the goal of teaching and learning			v		
B	Whilst-teaching (Monitoring)					
	1. The students are ready to learn the materials		v			
	2. The teacher asks the students to read the text				v	
	3. The students read the text					
	4. The students answer the metacognitive question				v	
	5. The teacher gives chances to the students for asking				v	

	questions					
	6. The students ask questions		v			
	7. The students ask to their classmates			v		
	8. The teacher checks the students' understanding				v	
	9. The teacher give enough time to the students to arrange their seat/to move in groups					v
	10. The students cooperate well in groups					v
	11. The students speak in English			v		
	12. The students use dictionary to help them			v		
	13. The students offer themselves to be the volunteer.		v			
C	Post-Teaching (Evaluating)					
	1. The teacher summarize and reflects the lesson			v		
	2. The students reflect their learning				v	
	3. The teacher previews on the upcoming materials			v		
	4. The teacher gives rewards and motivate the students to participate more in the next meeting			v		
D	Class situation					
	1. Students' enthusiasm/motivation				v	
	2. Students' involvement				v	
	3. Time alocation			v		
	4. The use of media				v	
	5. The teacher's instructions			v		

Table 6. Observation Checklist

Description:
0= not applicable
1= unsatisfactory

2= average
3= above average
4= excellent

Interviews can provide information gathered through the students' own reflection, observations, and interactions with the teacher. Students' responses to the interviews may also provide their perceptions on what occurs in a classroom.

Once the interviews transcribed, they were analyzed by addressing the data into some categories containing certain patterns indicating students' perception, behavior, observation, etc. Data gathered from students, when used in conjunction with other data collection instruments, could be used to validate findings.

In this research, interviews were used to gather the data about the students' feelings during the teaching and learning process, their reflections on learning, their observations during the classes, their success and difficulties in learning, and their perceptions on the instructional materials.

3. Questionnaire

Questionnaires have the advantage of being easier and less time-consuming to administer than interviews, and the responses of larger numbers of informants can be gathered (Burns, 1999:129). In this research, open-ended questionnaires were used at the end of the teaching and learning process to gather the data about the students' perceptions on the use of metacognitive strategy, and the improvements they made during learning by using metacognitive strategy.

Although they cannot provide deep information, open-ended questionnaires provide the students freedom to express their responses to the

questions. However, open-ended responses are more difficult and time consuming to analyze. To facilitate analysis, a code, containing key words, needs to be developed, to ensure that responses can be compared across completed questionnaires (Kutner et al, 2007:25).

G. Data Analysis

To analyze the data, the researcher referred to the stages of data analysis suggested by Burns (1999: 157-160). They are:

1. Assembling the data

In this step, the researcher assembled the data such as field notes, questionnaires, interview transcribes, and so on and scan the data in a general way to show up broad patterns so that they can be compared and contrasted. Thus, the researcher could see what really occurs in the field. In Burns' words it is useful to note down thoughts, ideas or impressions as they occur (Burns, 1999: 157)

2. Coding the data

After scanning the data, developing categories and codes were used to identify the data more specifically. As what Burns (1999: 157) suggests, coding the data is a process of attempting to reduce the large amount of data that may be collected to more manageable categories of concepts, themes or types.

3. Comparing the data

Once the data have been coded, the researcher needed to see whether the patterns were repeated or developed across different data collection techniques. Besides identifying relationships and connections between different sources of

data, the other things that the researcher could do is mapping frequencies of occurrences, behaviors or responses.

4. Building interpretations

The fourth stage was the point where the researcher should deal with a great amount of creative thinking in describing, categorizing, coding and comparing the data to make sense their meaning. It enables the researcher to come back to the data several times to pose questions, rethink the connections and develop explanations of the bigger picture underpinning the research (Burns, 1999: 159). After that, discussions with the collaborator were needed to make it possible for the new discoveries or interpretations as well as noting down questions and thoughts that occur behind surface descriptions.

5. Reporting the outcomes

The last stage of data analysis process was presenting an account of research for others. The researcher should ensure that the report covered the major processes of the research and supported the findings and outcomes with examples from the data. In general, the report included the original issue or questions underlying the study, describing the research context, outlining the finding supported with the sample data, relate the finding and the context, and suggesting how the project has been fed back into practice so that it could lead to other areas for research.

H. Validity and Reliability of the Data

Since the researcher referred to Burns' (1999: 161-163) criteria of the fulfillment of the research validity, this research fulfilled the following criteria:

1. Outcome validity, related to the notion of action leading to outcomes that are "successful" within the research context. This research was expected to be able to solve more than one problem in teaching-learning process, for example ones which are related with reading comprehension, to be independent learner and involvement.
2. Process validity, related to the extent which raises questions about the process of conducting the research. Observing classroom activities, making field notes during the lessons, interviewing students, and having discussion with the collaborator initiated the process validity of this study.
3. Catalytic validity, related to the extent to which the researcher allows participants to deepen their understanding of their social realities of the context and their role and the action taken as a result of these changes, or by monitoring other participants' perceptions of problems in the research setting. In this case, the researcher asked the students' responses to the changes occurring to themselves.
4. Democratic validity, related to the extent that parallels the process of collaborative enquiry or reflective dialog with "critical friends" or other participants. Asking the teacher to act as an observer who observe and report the students' reaction during the teaching and learning process

fulfilled this criterion. Moreover, the researcher asked the collaborator to contribute in observing and reflecting the action.

5. Dialogic validity means that the researcher has dialogue with the collaborator and the teacher in reviewing what she had done in the classroom. In this research the researcher had dialogues with the collaborator to review the actions so that she could plan better lessons for the next meetings. She also had a dialogue after the whole actions were implemented and the findings were formulated to validate her findings and to evaluate what had she done.

While using those principles, the reliability of the data was gained by giving genuine data, such as the field notes, questionnaires, interview transcripts and other records. The triangulation (Burns, 1999:163-164) techniques used in this research were:

1. Time triangulation: in which the data were collected over a period of time to get a sense of what are involved in the processes of the changes. In this research, the researcher gathered the data about the improvement on reading comprehension through having pre-test and post-test. Furthermore, the portraits of the classroom situation were recorded in the observation checklists and field notes which were taken in every meeting.
2. Investigator triangulation: more than one observer was involved in the same research setting to avoid biases. In this research the collaborator and the English teacher were in charge of observing the teaching and

learning process so that both observers contributed much in the making of the current field notes and observation checklists.