THE USE OF DISCOVERY TECHNIQUE TO IMPROVE GRAMMAR MASTERY

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Abstrak: Tujuan dari penelitian ini adalah untuk meningkatkan penguasaan tata bahasa melalui *Discovery Technique*. Rancangan penelitian adalah penelitian tindakan. Metode ini digunakan untuk meningkatkan dan memodifikasi pengajaran dan kualitas pembelajaran di dalam kelas. Subyek penelitian ini adalah mahasiswa semester dua Program Study Pendidikan Bahasa dan Sastra Indonesia (PBSI) pada tahun akademik 2014/2015. Prosedur penelitian adalah perencanaan, Pelaksanaan, analisa, dan refleksi. Dengan penggunaan *Discovery Technique*, mahasiswa dapat meningkatkan penguasaan tatabahasanya. Hal ini dapat diketahui dari peningkatan nilai dari tes diagnostik, siklus 1, dan siklus 2. Rata-rata nilai dari tes diagnostik tes adalah 64.44, kemudian siklus 1 68.14, dan 75.70 di siklus 2. Disamping itu, hasil angket menunjukkan bahwa mahasiswa memiliki motivasi tinggi dalam belajar tatabahasa, mempunyai pemahamahan yang lebih baik dalam mengaplikasikan tatabahasa, meningkatkan cara berpikir kritis, mereka juga menikmati belajar, dan memberikan manfaat.

Kata Kunci: Penguasaan tatabahasa, Discovery Technique, berpikir kritis

Abstract: The objective of the research is to improve grammar mastery through Discovery Technique. The research design was action research. This method is for improving and modifying the teaching and learning quality in a classroom. The subjects of the research were the students of the second semester of *Pendidikan Bahasa dan Sastra Indonesia* (PBSI) Study Program in the academic year 2014/2015. The procedures of research were planning, implementing, analyzing, and reflecting. By implementing discovery technique, the students could improve their grammar mastery. It can be known by the improvement of the score from diagnostic test, cycle1 and cycle 2. The mean score of Diagnostic test was 64.44, then 68.14 in Cycle 1, and 75.70 in cycle 2. Besides, the result of questionnaire showed that students have high motivation in learning grammar, have better understanding of applying grammar, improve their critical thinking, they also enjoy learning.

Keywords: Grammar Mastery, Discovery Technique, critical thinking

INTRODUCTION

Learning language cannot be separated from how learners use the language. In learning English, the learners in Indonesia learn the proficiency of English communication both in spoken and written form. The communicative

competence covers four competences namely grammatical, sociolinguistics, discourse and strategic. Grammatical is one of the competency must be mastered by the learners. Grammar is partly the study of what forms (or structures) are possible in a language. According to

Thornbury (2006:1), grammar has been concerned almost exclusively with analysis at the level of sentences. Grammar deals with the organization or morphemic units into meaningful combinations. There is a fact that it cannot be denied that the use of language is built by rules. Here, the use of grammar will influence the meanings which want to be negotiated in a communication. It is because every rules of grammar will present different meaning. Therefore, the students need to know about some of different way in putting words together to make meaningful sentences by comprehending grammar.

University placed English as one of compulsory subject. In PBSI Department, especially second semester students, they have problems in understanding and applying English grammar although the lectures have given the pattern clearly and also examples that are related to the material, they cannot apply it properly. It is supported by the result of preliminary study. It was 64.4. Here, the students apply inappropriate grammar. They still translate word by word from Indonesian to English, so the composition of sentences incorrectly arranged. They cannot differ the use of tenses in appropriate situation. To overcome the problems, the lecturer should enable students to carry out their communication purposes. Adult learners appreciate and benefit from direct instruction that allow

them to apply critical thinking skills to language learning. Teaching at this stage, an inductive approach to grammar with suitable examples and patterns will be effective (Brown, more 2007:124). Lecturers should build and motivate students by allowing the students to discover rules rather than being told them. Then, the lecturer should serve the students the best way to help them develop problem skills, learning strategies, critical thinking and learner autonomy. While planning this way, the lecturer leads the students to understanding grammar through a series of steps by using Discovery technique. This technique aims to lead students towards a generalized grammar rule or pattern. By knowing the problems, the researcher formulates the research problem follows: How can Discovery Technique improve grammar mastery?

Grammar is a description of the rules that govern how a language's sentences are formed (Thornbury, 2006:1). Meanwhile Brown (2007:420) explains that grammar is the system of rules governing the conventional arrangement and relationship of words in a sentence. Grammatical competence is very important. Without knowledge of how to organize words into sentences well, a sentence will be difficult to be understood. Learners need to practice forms in

communicative task. Rodriguez (2009) explained that instructors should emphasize meaningful interaction and authenticity in learning activities and held that communication should be the goal of instruction. Further, for optimizing the conditions for teaching grammar, Ellis (2006) in Brown (2007:421) offers some answers here; a) both form and meaning should be emphasized, b) focus more strongly on forms that are problematic for learners, c) explicit grammar teaching is more effective at the intermediate to advanced levels than beginning levels, d) attend to both input-based output-based (comprehension) and (production) grammar, e) both deductive and inductive approaches can be useful, depending on the context and purpose of instruction, f) incidental focus of form is valuable in that it treats errors that occur while learners are engaged in meaningful communication, g) corrective feedback can facilitate acquisition if it involves a mixture of implicit and explicit feedback, h) Separate grammar lessons ("focus on forms") and grammar integrated into communicative activities ("focus form") are both viable, depending on the context.

Discovery technique is a teaching technique in which students are encouraged to work out rules and meanings for themselves rather than being given everything by the teacher. Harmer (1991:160), Scrivener, J (1994) as cited by Tennant (2005) suggested that discovery technique as an implicit way of presenting grammar. The 'discovery technique' aims to lead students towards a generalized grammar rule or pattern. The idea is that students will 'discover' the grammar through a series of steps (these might be language awareness activities, tasks, pictures, questions etc) and will deduce both the form and the meaning from the context(s).

Discovery technique has some benefits as Saumell (2001) explained. It has cognitive, linguistic, benefits; first, Cognitive benefits, it encourages analytic learning, exploits learners' cognitive skills, improves critical thinking skills, involves students in problem-solving tasks, helps learners become aware of and articulate their mental processes, learners participate actively in the learning process and understand and remember better what they have worked out for themselves; second, Linguistics benefits, it resembles natural language learning/ language acquisition and provides extra language practice; third, Social benefits, it increases student participation and fosters collaboration, empowers learners thus enhancing autonomy and self-reliance, and motivates learners. Discovery technique can help students for solving their problems on their own experiences. The students can interact with their environment by manipulating and exploring their knowledge with questions and experiments.

According to Verner (2014), there are five steps of applying Discovery Technique; first, Listen for Comprehension. In this phase, the lecturer reads a passage to students which contains the target structure; second, listen with an Information Gap. Here the lecturer gives a transcript of the passage this time with the target grammatical structure replaced by blanks; third, students discover the rule. In this phase, the lecturer gives the students several examples which use the target structure correctly; fourth, do an Error Check. The students have listened to the target structure and discovered the rule for themselves, give them another passage that uses the target structure; fifth, Put their Knowledge to Good Use. The lecturer have to sure use the grammar structure they have just discovered.

RESEARCH METHOD

In conducting the research, the researcher uses Action Research. Action research is a method for improving and modifying the teaching and learning quality in a classroom. As Gregory, Kemmis and Mc Taggart (in Richard, 2001:12) mentioned that action research is

used to refer the teacher method classroom investigation which seek to increase the teacher' understanding of classroom teaching and learning, and to bring about change in classroom practices. By knowing the theory, the lecturer solves her problems of teaching scientifically. In conducting this research, the researcher applies four essential moments of planning, action, observation, and reflection.

The research was conducted at STKIP PGRI Trenggalek in April 2015. The college was chosen because she as an English lecturer there, the researcher found problems faced by the students in applying the rule of grammar in composing sentences. The subjects of the research were the students of the second semester of Pendidikan Bahasa dan Sastra Indonesia (PBSI) Study Program in the academic year 2014/2015. There were two classes but only one class was taken as the subject of the research. It was class B that consisted of 25 students. The students of class B actually have high motivation in learning English. However, their low comprehension of grammatical rules makes them facing difficulties in composing sentences properly.

Before conducting the research, the researcher employed Preliminary study. Preliminary study was conducted to identify the problem faced by the students. Most of students had score under 65. Four

steps of action research will be conducted in cycles i.e. planning, action, observation, and reflection.

Planning designs the strategy, designing lesson plan and setting upthe criteria of success. It is necessary to set up the criteria of success to know whether the students' development is reached. The study is categorized successful if the students can compose their sentence correctly the score is 70 and above.

Acting is conducted two meetings each cycles. During the implementation of the technique, researcher is helped by a collaborator. This research applied Discovery Technique to overcome the students' problem mastering grammar. She guides some steps for employing the strategy. First, the researcher reads a transcript of "A Person a who has made difference: My grandfather" while the students listen what the lecturer read. Second, give the students a transcript of the passage as the lecturer read with the target grammatical structure replaced by blanks. Third, have your students discover the rule by themselves and discuss it with their friend. Lecturer guides the process of discovering. Fourth, students check for errors in the target language independently. Then the students need to correct if they find the errors. Fifth, the students try to write down their own sentences uses the target language.

In observation stage, the researcher uses two instruments to collect the data. The instruments are observation checklist and questionnaire. During the implementation of Discovery technique, the collaborator observes all activities in classroom by using observation checklist. The researcher also constructs questionnaire. The questionnaire will be distributed after the cycles finish. For knowing students opinions, the researcher applies Liker Scale. As Ary (2002, 224), Liker Scale assesses attitude toward a topic by presenting a set of statements about the topic and asking respondents to indicate for each whether they strongly agree, agree, are undecided, disagree, or strongly disagree. The questionnaire consists of 10 questions related to the use of Discovery technique.

FINDINGS AND DISCUSSION

In Cycle 1, this part covers about planning, the implementation of the action, observing and reflecting.

First stage is planning. Discovery technique is used in this study to help students overcome their problem in grammar. To apply it, the students were guided to do the following steps. She guides some steps for employing the strategy. First, the researcher reads a transcript someone story while the students listen what the lecturer read. Second, give

the students a transcript of the passage as the lecturer read with the target grammatical structure replaced by blanks. Third, have your students discover the rule by themselves and discuss it with their friend. Lecturer guides the process of discovering. Fourth, students check for errors in the target language independently. Then the students need to correct if they find the errors. Fifth, the students try to write down their own sentences uses the target language.

For implementing cycle 1, the researcher took 2 meetings. First meeting, the researcher let the students to discover a grammar rules by their own. It was held on April 15th, 2015. She read a text entitled "A Person who has made a difference: My grandfather" while the students listen it. After reading, the researcher distributed a transcript of the text the same as she read but it has some blanks space in targeted grammar. The students should fill the blanks space with the appropriate form of grammar they have listened. Then, the students discussed their works with their friends. They shared the grammatical structure and tried to find out the rule. Next, they checked their own work whether it is right or wrong. After finding

the rule, they tried to compose their own sentences as the target grammatical structure they have found. The last, the researcher and students discussed the rule that the students have found. Next, second meeting, the researcher asked students to write down a paragraph about impressive experience. By writing, the researcher can know the progress of students' understanding toward the use of simple past tense they learned in the previous meeting. It was held on April 22nd, 2015.

In observing the implementation of Discovery Technique, it was found that the students still had several problems in understanding the use of simple past tense. Some of students' problems such as; I am got accident last week, my mother given a special gift in my birthday, I spended much money for buying favorite novel. Related to students' work, the students cannot use simple past tense properly. First, they use "to be" and Verb 2 together. Second, they still difficult to differ verb 2 and verb 3. Third, they generalize the rule of changing Verb 2 in regular by adding -ed instead to irregular verb. However, the result of cycle 1 showed the improvement. It can be seen from the score and frequency as follow.

Table 1. Score of Cycle 1

Category	Score	Frequency
Very good	86-100	0
good	70-85	9
fair	59-69	18
poor	45-58	0
Very poor	00-44	0

The table above shows that the mean score of students' writing is 68.14 It means that it is categorized into "fair".

In stage of analyzing and reflecting, the result of students' work shows that this study was still unsuccessful. It can be seen from the mean score obtained after the implementation of Discovery technique. The study was successful if the mean score could achieve 70. Therefore, based on the students' result in cycle 1, the study was unsuccessful because the mean score was 68.14 did not meet the criteria of success determined. Some problems arouse in implementing Discovery technique. First, the students cannot leave "to be" in their sentence. It makes the sentences were wrong. Second, the students' knowledge about Verb-2 was still poor. They wrote Verb 3 instead of Verb 2. Meanwhile some of Verb 2 and Verb 3 are in different form. Third, the students generalized the use of Verb 2 by adding –ed in the end of words. Considering the problems above, the implementation should be revised. The research continued cycle 2 with several changes.

Based on the problems found in cycle 1, the researcher implemented Discovery Technique with several changes. First, she asked the students to analyze wrong sentences in past tense form.. Then they have to correct the sentences. So they can have better awareness toward the structure and the use of Verb 2. Second, they have to present and discuss with their friends in a group of 4 students to know deeply about the sentences.

The implementation of cycle 2 was conducted in one meeting. The meeting was focused on analyzing the wrong sentences, doing exercise, and applying simple past tense. It was held on April 29th, 2015.For the first 50 minutes. researcher asked the students to discover the form of simple past tense. First the researcher gave some sentences which have grammatically wrong. Second, the students should analyze the sentences and correct them. Third, they present and discuss their analysis with their friends in a group. Fourth, the researcher read a text entitled "A person Who Has Made a difference: George Lucas". Fifth, the students should fill the blanks space with simple past tense form they have listened. As the researcher did in cycle 1, she also asked the students to compose a writing work to know the students understanding to how well they can apply simple past tense in paragraph. The topic of writing was about their experiences for the first day in college.

Observing

Relate to the result of students' work, it was found that students have good progress in applying simple past tense. They left "to be" before Verb 2. They also can differ which verb use regular verb and irregular verb. So the students' error can be minimalized. The result of students' score are showed as follow.

Table.2. Score of Cycle 2

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Category	Score	Frequency	
Very Good	86-100	2	
Good	70-85	25	
fair	59-69	0	
Poor	45-58	0	
Very Poor	00-44	0	

The table above shows that the mean score of students' writing is 75.70. It means that it is categorized into "good". Further, the percentage of students who got the score between 70-85 is 92.6%, and the range score 86-100 is 7.4%.

Based on the students' result, the study was successful. It can be seen from the mean score gained in the cycle 2. With the mean score 75.70, it indicated that the mean score had achieved the criteria of Based success. on the result questionnaire, 90, 2% students answered that they agree that Discovery Technique can improve their motivation and learning, it also found that 88% students liked doing based the activities upon discovery technique very much materials

technique, 87. 3% students mentioned that Discovery technique can increase critical thinking, 91.6% students answered that Discovery Technique can help them find the formula by analyzing sentences, 82% of the students said they can apply this method by own, 92.4% students said that Discovery Technique help them understanding the tenses better, 89.9% students agree that Discovery Technique can increase their motivation in learning grammar,85% of the students agreed the discovery technique was beneficial. While most of the students expressed that they learned the subjects better and they can remember material more easily.

The findings of the study deal with a theory by Newman (2009). He mentioned

that Discovery Technique also have some advantages; First, discovery-based activities can capture and hold students' attention as effectively as most interactive presentations can, and they demonstrate to students that working with grammar do not have to be dull. Second, because of students' personal involvement in exploratory tasks, discovery techniques help them remember rules more easily. Third, because of their analytical character, these techniques actually show students approach other, unfamiliar ways to grammatical structures. Fourth, because of the independent work requirements integral to discovery tasks, these activities prove to students that they can recognize a rule by themselves, and that they can be active "explorers" of the language even outside the classroom. It also in line with previous study conducted by Areni, Hapsari, and Trisanti (2013) entitled " Strategi *Inductive* Learning pada Pembelajaran English Grammar untuk Meningkatkan Kompetensi Gramatikal Mahasiswa." This research used classroom action research which tried to apply a method of Inductive Learning in a class of Advanced English Grammar to improve the students' grammatical competence and to find out whether there were students' behavior changes in learning English grammar. Based on the data analysis, the result of this research was satisfying. The

result From test cycle 1, there were 32% students who got less than 70, while in cycle 2 it increased to 76%. Based on observation, most of them liked Inductive Learning method to be applied in grammar classes because this method is fun and interesting.

CONCLUSION

By implementing discovery technique, the students could improve their grammar mastery. It can be known by the improvement of the score from diagnostic test, cycle1 and cycle 2. The mean score of Diagnostic test was 64.44, then 68.14 in Cycle 1, and 75.70 in cycle 2.

Some suggestion are purposed for other lecturers, students, future researcher. The lecturers are recommended to apply discovery technique to help their students improve students' grammar mastery. By implementing it, the students will be more motivated in learning grammar and finding they own concept. It is suggested that the students employ discovery technique to help them develop their mastery in grammar. They need different way to be used in learning grammar. By knowing the grammar concept well, it also help them apply to other language skills. The researcher also suggests that the future researchers use the study as reference to conduct the action research in different type of tenses.

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