THE EFFECTIVENESS OF INQUIRY BASED TEACHING TO TEACH GRAMMAR

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ABSTRACT

Inquiry-based teaching is a teaching method that focuses on students' investigation on questions that are challenging in which the questions will lead students to be active and creative to find the answers. The stages are asking, investigating, creating, discussing, and reflecting. This article refers to an experimental study about the effectiveness of Inquiry based teaching to teach grammar at SMK Tamasiswa Sukoharjo, Central Java. The population of this research is the first grade students of SMK Tamansiswa Sukoharjo. The sample of this research consists of two classes; class A was used as the experimental group treated by using inquiry based teaching and class B as the control group treated by using lecture method. The sampling technique used is cluster random sampling. The instrument used to collect the data is grammar mastery test. The data were analyzed by using t-test. Based on the results of the analysis, the findings of this research is inquiry based teaching is more effective than lecture method to teach grammar. Based on the above findings, it can be concluded that inquiry based teaching is an effective method to teach grammar for the first grade students of the SMK Tamansiswa Sukoharjo.

Keywords: *Inquiry based Teaching, grammar mastery, lecture method*

A. Introduction

Lock (1997: 1) argues that grammar is a set of rules which specify all the possible grammatical structures of the language including two aspects. They are the arrangement of words and the internal structure of word. In line with Lock, Brown (1994: 347) states that grammar is a system of rules governing the conventional arrangement and relationship of words in a sentence. Grammar has important role in the existence of the four language skills because grammar is the basic of English. Harmer (1998: 5) states that every sentence that performs functions is made up of the grammatical elements. Inferring from Harmer, we know that grammar is a crucial point in language, no matter how simple a sentence is, it still needs grammar to convey its meaning. Although we know that grammar has an important role in language learning, the learners often feel that grammar has become a complicated part in language learning. It can be a big problem for the learners if they lack grammar understanding.

According to Bastone (1994: 3), "Language without grammar would certainly leave us seriously handicapped". Based on the statement, in language teaching, grammar is an integrated part of language used by the learners in everyday communication. We realize that without learning grammar, we would not be able to speak English in the right way. Although we know that grammar has an important role in language learning, the learners often feel that grammar has become a complicated part in language learning. It can be a big problem for the learners if they lack grammar understanding.

For the reasons above, the Indonesian government has given a lot of attention to English in the education field. Our government has decided that English is one of the subjects that should be taught in every level of education starting from Secondary School. The aims are to motivate and to prepare students in order to be more ready and more confident in facing English in the higher level of education. Giving English lesson in the school in Indonesia is

not easy because English is a foreign language. Most of students regard English as a difficult lesson that has many systems different from Indonesian, such as grammar, pronunciation, etc.

The researcher prefers to conduct this study on grammar mastery because grammar is very important. All of English skills need grammar. Strumpf and Douglas (2004: 14) say "We study grammar so that we may speak and write in a clearer and more effective manner". River (1987: 15) states, "Grammar is a set of formal patterns in which the words are arranged in order to convey larger meaning". So, the function of grammar is to convey meaning. Meaning is used because we want to express our idea, feeling, thought, or opinion. Besides, in most English tests, grammar mastery is also tested. While, based on the observation and interview to teacher and students, some students still have difficulty in learning grammar. They get confused when they have the grammar test. The students looked confused in using pronoun, comparison, article, adverb, and conjunction.

Grammar mastery is needed in English. Students must understand grammar well because all of English skills involve grammar. Practically, many students still find the difficulties to master grammar. Based on the interview to the students and the teacher, the students were looked confused in using pronoun, comparison, article, adverb, and conjunction. They still make mistake when doing the exercises. They have not understood the concepts. Some of them understand when the lecturer is explaining, but they forget again when they are doing the exercises.

Successful grammar teaching is also based on the method used by the teacher. Method is important to make students interested in learning grammar, so they can master their grammar. Based on the observation and interview to the teacher and students, in the grammar lesson, the teachers tend to use a deductive strategy, in which they start the lessons by giving the rules of grammar accompanied with examples of rule application in sentences. Teacher uses the traditional method, that is lecture method. According to Flight (2003: 2), a lecture is an oral presentation intended to present information or teaches people about a particular subject, for example by a university or college teacher. This kind of routine instruction may result in the students' boredom which gradually discourages them and, as a result they can not maximize their learning outcome.

The researcher makes the conclusion that students need the method which is more interesting. The method which can make them more active and involve them, so the possibility of forgetting is less because they solve the concept of grammar by themselves. They are not only passive just accepting the material from the teacher. Regarding the aforementioned phenomenon, the researcher wants to solve the problem in handling the grammar lessons by applying the Inquiry Based Teaching. According to Kindsvatteret al (1996: 258), Inquiry is a teaching method which stimulates the skill in critical thinking to analyze and solve the problems systematically. Inquiry is a very effective method as it can be used to teach the material, solve problems, train critical thinking as well as make a decision. Choosing Inquiry based Teaching in teaching grammar because grammar is viewed as the difficult part of English, so students can participate to find out the grammar concept. They will remember more about the concept because they learn by themselves.

The objective of this research is to find out whether using inquiry based teaching method is more effective than lecture method in teaching grammar to the first grade students of SMK Tamansiswa Sukoharjo in the academic year of 2013/2014.

B. Literature Review

1. Grammar Mastery

Grammar has some definitions. Furthermore, Richards, Platt, and Weber in Nunan (2005: 2) define that grammar is a description of the structure of a language and the way in which units such as words and phrases are combined to produce sentences in the language. Ur (2009: 87) states that grammar is a set of rules that defines how words (or part of words) are combined or changed to form acceptable units of meaning within a language. Ur (2009: 4) says that grammar may be roughly defined as the way a language manipulates and combines words in order to form longer units of meaning. We have to know grammar because we need to express our feeling, idea, and so on in an appropriate way. From explanations above, the researcher concludes that grammar is a set of language rules that regulates the pattern of sentences to convey the meaning.

The function of grammar goes broader when we reflect Thornbury's idea. He argues that grammar is a description of the rules for forming sentences, including an account of the meanings. These forms convey meanings and it is said that grammar adds meanings that are not easily inferable from the immediate context (2009: 6). Based on this opinion, it can be assumed that grammar can be used to communicate meaning when there is no context. Not all sentences are complimented by context of what, where, when, or how the language is used. Using grammar, we can still grasp the meaning of the sentence. Grammar may be viewed as a process for making meaning clear when there is no contextual information.

In language teaching, the role of grammar perhaps becomes one of the most controversial issues. The place of grammar in curricula of language teaching, at least, has changed for three periods. Some people believe that the place of grammar in language teaching depends on the method (Brown, 2004). A good teacher has several possibilities of how to teach grammar. There is a number of techniques for presenting and practicing grammar. According to Harmer (1999: 1) the grammatical information can be given to students in two major ways. The first one could be extremely covert and the second will be made extremely overt.

Covert grammar teaching means that grammatical facts are hidden from the students- even though they are learning the language. Students may be asked to do any activity where a new grammar is presented or introduced, but their attention will be drawn to this activity not to the grammar.

Overt grammar teaching means that the teacher actually provides the students grammatical rules and explanations-the information is openly presented. With overt teaching grammatical rules are explicitly given to students, but with covert teaching students are simply asked to work with new language to absorb grammatical information which will help them to acquire the language as a whole.

It is expected to do a lot of structures in teaching and practicing, and less really free communicative activity at the beginner level. The teaching of grammar is likely to be fairly covert since the main aim is to get students to use language as much as possible. On the other hand students at intermediate levels should be involved in more communicative activities and should have less grammar teaching. The teaching grammar would probably be more overt. Then advanced students can actively study grammar in more overt ways.

According to Krashen (1984: 20), the role of grammar aspect is a monitor device, that is if students feel difficulty in arranging new sentences in the second language, so the grammar knowledge can be used to create the new sentences in the second language.

The correlation between grammar knowledge as a production of study process and language skill as acceptance product is indirectly. It means, the grammar knowledge can not just help students to make speech or sentences in English, if there is not covert language skill that they have. For example is a student master the English grammar, but he does not have enough vocabulary to speak or listen, so his knowledge is useless.

According to Haunstein (1998: 96), mastery is the ability and desires to originate and perfect abilities and skills. Webster (1992: 732) defines mastery as skill or knowledge that makes one master of a subject. In line with her, Quirk says that mastery is full power to control something or great skill/knowledge in a particular subject (1998: 644). Based on the argument, grammar mastery is great skill of people to use the knowledge of language rule that regulates the pattern of sentences to convey the meaning.

For the study, the researcher focuses on the comparison, article, pronoun, adverb, and conjunction.   The writer decided to choose five aspects because she has interviewed to the students about the materials which they have not understood. They are still confused about these aspects. Covert grammar is applied in inquiry-based teaching method, and overt grammar is applied in lecture method.

2. Inquiry-based Teaching

Branch (2004: 11) defines Inquiry-based teaching is a process where students are involved in their learning, formulate questions, investigate widely and then build new understandings, meanings and knowledge. Elliot (2000: 404) defines inquiry-based teaching by saying that inquiry teaching is a term for teaching that permits students to be active partners in the search for knowledge, thus enhancing the meaning of what they learn. Slameto (2003: 116) says that inquiry-based teaching is a teaching term which follows the concept in giving opportunity to students to develop their intellectual potency through their own efforts to find something as the answer of certain problem through investigation. The definitions imply that inquiry-based teaching is a teaching method that focuses on students' investigation on questions that are challenging in which the questions will lead students to be active and creative to find the answers. It is not teacher centered. Teacher is not the core of the whole activities in class. In some cases, teacher places him or herself as an enabler. It means that teacher provides initial question that triggering the student self-finding. Teacher gives students opportunity to learn. Teacher arranges classroom condition in a way that encourages students to think about the means of solving problems, and teacher works from the assumption that students should actively seek information rather than passively accept it in lectures. Teacher, however, is not the only source of information. Students may use other sources to find out the information. Teacher's role is not transferring knowledge but it is merely enabling, coaching, and supporting students to discover the concept of subject matter by themselves.

Dewey (2010: 2) says the process of inquiry-based teaching consists of: (1) asking, there is a question or a problem the learners begin to describe; (2) investigating, in order to answer the question, the students begin to gather information by doing investigation; (3) creating, students are asked to create new thought and ideas outside their prior knowledge; (4) discussing, students share their new ideas with others; and (5) reflecting, it is chance for students to look back to the triggering question, the investigation, and the conclusion or the new thoughts.

The advantages of inquiry-based teaching are that it is essential, it can awake one's confidence, interest, and self-esteem, its best when working on interdisciplinary projects that reinforce multiple skills or knowledge areas in different facets of the same project, it can work with any age group, it acknowledges the children especially children from minority and disadvantaged communities.

3. Lecture Method

According to Flight (2003: 2), a lecture is an oral presentation intended to present information or teaches people about a particular subject, for example by a university or college teacher. According to Gulo (2008: 136), the lecture method is the only conventional method and still used in teaching learning strategy. It is the oldest, the most widely used, and the most frequently used in form of presentation, livery teacher should know how to develop and present a lecture. They also should understand the advantages and limitations of this method. Lectures are used for introduction of new subjects, summarizing ideas, showing relationships between theory and practice, and reemphasizing main points.

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The advantages of this method are that it gives the teachers chance to expose students to unpublished or not readily available material, it allows the teachers to precisely determine the aims, content, organization, place, and direction of a presentation, it can be used to arouse interest in a subject, it can complement and clarify text material, it complements certain individual learning preferences, and facilitates large-class communication. While the disadvantages of this method are that it is teacher-centered process, it makes students hearers and recorder, it is verbalism, lecture process runs depending on the speed of speaking and the dialect of the teacher.

The hypothesis is formulated as follows: using inquiry-based teaching method is more effective than lecture method in teaching grammar for the first grade students of SMK Tamansiswa Sukoharjo.

C. Research Methodology

The method used in this study is experimental research. This research used Quazi-Experimental design with Pretest-Posttest and control group. This research was conducted at SMK Tamansiswa Sukoharjo, Central Java. The research was conducted from January 2013 to June 2013. The population of the research was the first grade students of SMK Tamansiswa Sukoharjo. There were seven classes. Total of population was 265 students. The sample of this research consisted of two classes; class A as experimental group treated by using inquiry based teaching and class B as the control group treated by using lecture method. Each class consisted of 30 students. The sampling technique used was cluster random sampling technique. In this study, the researcher set the experimental and control group using lottery. The data obtained was the result of grammar mastery test. Grammar test was used to know the result of students' grammar mastery before and after the treatment. Pretest was held to know the beginning balance of two samples. The normality

and homogeneity tests are done before testing the hypothesis. To test hypothesis, the researcher used t-test. H_o is rejected if t_o is higher than t_t.

D. Research Findings and Discussion

From the result of pretest that the researcher did, two samples were balanced. The result of t-obtained (0,7885) is lower than t-table (1,96), so H_0 is accepted. It means that the students of experiment group had the same grammar mastery with students of control group.

Before testing hypothesis using t-test, the data must be normal and homogeneous. The result of normality and homogeneity test were compared to the table. Measuring the normality using Liliefors. The result can be seen on the table 1.

Table 1. Normality Test

No	Data	(Lo)	(Lt)	( )	Status
1	A_1	0.085	0.161	**0.05**	Normal
2	A_2	0.136	0.161	**0.05**	Normal

All the highest value of L_o is lower then L_t or ($L_o<L_t$) at the significance level = 0.05, it can be concluded that the data are in normal distribution.

For measuring the homogeneity test, the researcher used Bartlett formula. The result can be seen on the table 2.

Table 2. Homogeneity Test

sample	df	1/(df)	s_i^2	log s_i^2	(df) log s_i^2
1	29	0,034483	90,40948	1,956214	56,73021
2	29	0,034483	62,56466	1,796329	52,09354
				Sum	108,8237

$$\chi_o^2 = (\ln 10)\left\{ B - \sum (n_i - 1)\log s_i^2 \right\}$$
$$\chi_o^2 = (2.3026)\,(109.248\text{-}108.8237)$$
$$= 0.977$$
$$\chi_{t\,(0.05)}^2 = 3.841$$

The result of the calculation, χ_o^2 (0.977) is lower than χ_t^2 (3.841). Thus, it can be concluded that the data are homogenous.

For measuring the hypothesis, the research used t-test. It is used to compare the means of two groups. The result of t-test can be seen on the table 3.

Table 3. T-Test

n_1	n_2	$n_1 + n_2 - 2$	t_o	t_{table}	Test Decision	Conclusion
29	29	56	1.99	1.96	H_0 is rejected	There is significant difference

The t_o is higher that t_t, it can be concluded that there is a significant difference in grammar mastery between experimental group and control group. Therefore, the inquiry based teaching is more effective to teach grammar on the first grade students of SMK Tamansiswa.

E. Conclusion and Suggestion

Inquiry based teaching is proved as an effective method to teach grammar. In order to achieve a good result, it must be applied properly in the teaching-learning process. The procedures of inquiry based teaching are: (1) teacher distributes the handout of reading text which contains of predetermined grammatical concepts that become the topic of the lessons; (2) teacher gives questions about the grammatical concept (definition, function, kinds, and use) which is being learned; (3) teacher instructs the students to work in groups to find out the grammatical concept (definition, function, kinds, and use) which is being learned from some sources; (4) teacher asks students to write their result of investigating; (5) teacher asks students to present their answers in front of the class; (6) teacher guides the students' understanding of the grammatical text and then concludes it; (7) teacher gives the exercises to the students; (8) Teacher and students discuss together about the exercises.

Based on the data analysis, it can be concluded that inquiry based teaching is more effective than lecture method to teach grammar for the first grade students of SMK Tamansiswa Sukoharjo.

The researcher would like to offer some suggestions as follows: (1) teachers can apply inquiry based teaching to teach grammar; (2) students are expected to be more active in the teaching and learning process in order to develop their grammar mastery; (3) the next researchers can use the result of this research as the starting point for conducting the further research with different students' condition and skill; (4) the next researchers can also develop teaching methods used in this research as a way of making revision to the weaknesses of this research.

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