# THE EFFECTIVENESS OF USING INDUCTIVE METHOD IN TEACHING ENGLISH GRAMMAR

Ade Novea Retty, Martono, Teguh Sarosa

English Education Department
Teacher Training and Education Faculty
Sebelas Maret University

E-mail: adhenovea@gmail.com

**Abstract:** This article presents the research results which are: (1) there is a significant difference in grammar mastery between students taught using Inductive Method and students taught using Deductive Method; (2) Inductive Method is more effective than Deductive Method. The research method used in this research is an experimental design. This research was conducted at SMP Negeri in Surakarta in the academic year of 2017/2018. The research population is the eighth-grade students. The samples are class VIII A as the experimental group consisting 28 students and class VIII B as the control group consisting 28 students. The research instrument used to collect the data is a test. The data were analyzed by using t-test formula. The computation of the t-test shows that t observation ( $t_0$ ) = 2.284 is higher than t table (54, 0.05) = 2.0048. It can be concluded that there is a significant difference in grammar mastery between the students taught using Inductive Method and the students taught using Deductive Method. The mean score of the experimental group is 58.29, while the mean score of the control group is 46.86. It can be concluded that Inductive Method is more effective than Deductive Method to teach English grammar.

**Keywords:** Grammar Mastery, The Simple Past Tense, Inductive Method, Deductive Method

#### INTRODUCTION

Grammar is one of the significant aspects which should be mastered well by the learners since mastering grammar leads them to a strong foundation to construct good and appropriate sentences either in spoken or in written form. Grammar is one element that links to four main skills namely speaking, listening, reading, and writing. Ur (2009:75)

states that grammar means 'the way words are put together to make correct sentences'. In addition, Thornbury (2002:1) states that grammar is a language study of the possibility in forming a sentence. Hence, grammar is really needed in order to communicate well in a foreign language. In order to communicate well, grammar is the

most basic knowledge to be mastered.

Although we know that mastering grammar is important, practically teachers rarely teach grammar in much amount of time because grammar is considered as a part of the four main skills. As mentioned in the syllabus of eighth grade of junior high school in reading skill, grammar is included in one of the recount text's language features so that grammar is not taught separately. Besides, teacher also needs to teach other materials with limited time provided by the school. With that provided time limit, students tend to be simply passive recipients. Further, as quoted by Diaz & Maggioli (2004:139), Burns (1995) states that rather than being a passive student, being an active student in the learning activity will enhance learning.

There are many ways of teaching. As stated by Jalani & Sern (2015), the common way of teaching is the Teacher-Centered Learning (TCL) method. The teacher-centered method is a method where the teaching-learning process focuses on the teacher and students are simply listening and passively involved. The activities in the class are centered toward the teacher, therefore, most of the students do not feel interested. Further, Jalani & Sern (2015) state that the stages of the teaching commonly method are lecture. practice, then test; where the teacher

explains the rules through lectures, followed by problem-solving exercises that must be completed either in class or at home.

The stages in the teachercentered learning method are mostly similar to the Deductive Method. Patel & Jain (2008:142) state that 'in Deductive Method, the teacher uses a grammar textbook'. The teacher tells the students the rule, explains it through examples then gives some exercises and tasks to the students. However, Deductive method has some weaknesses, such as: (1) this method simply makes students learn about language instead of language use; (2) this method lacks communicative activities; (3) passively receive learners material; (4) the learners have no important role in the teachinglearning process; and (5) the teacher hardly uses many teaching media.

Hence, the students need a method which is more interesting, the method that can make them teaching actively involved in learning process SO that the possibility of forgetting is because they solve the grammar's concept by themselves. They are not passively accepting the materials from the teacher. Regarding this phenomenon, the researcher wants to solve the problem in handling the grammar lesson by applying the Inductive Method. In addition, Diaz & Maggioli (2000:12-13) state that teacher's decisions have to consider the students' need as the main focus. This agrees with Patel and Jain's theory (2008:143) that in Inductive Method, the teacher takes the students' example as a first step of showing the rule. Further, Patel & Jain (2008:38) state that language is learned through practices. The more the students expose the language usage, the better chance of learning it. The major goal is to make students actively involved to discover the grammar concept and to solve the problems dealing with grammar themselves.

Some reasons why Inductive Method is suitable to teach grammar according to Patel & Jain (2008:143) are as follows: (1) this method takes students' example as the observed material; (2) this method makes students understand the difference between the target language and their own language; (3) the students understand more of the grammar use because they have to deduce the meaning and later they generalize the form or structure.

Hence, Inductive Method is more appropriate to be applied in teaching English grammar than Deductive Method because it leads students to be active during the lesson from the beginning until the end. By being active in the teaching process and the teacher guidance, students will be able to understand the material by observing the material then draw the conclusions. The students are not only mentally

active but also physically active because the students are asked to work with a group and they are invited to share their ideas with the other groups. The teacher's role in Inductive Method is as the facilitator guide students while the expressing their findings. On the contrary, bv using Deductive Method, the students are less active in teaching process because they tend to follow the material provided by the teacher. Students also will find difficulties while choosing the idea in grammar test because they tend to imitate the example that the teacher has given.

Therefore, the hypotheses of this research are as follows: (1) there is a significant difference in grammar mastery between students taught using Inductive Method and students taught using Deductive Method in teaching grammar to the eighth grade students of SMP Negeri in Surakarta in the academic year of 2017/2018 and (2) Inductive Method is more effective than Deductive Method.

### LITERATURE REVIEW

Grammar is a principal study of good usage about word's relation in the sentence (Patel & Jain, 2008:141). Meanwhile, according to Thornbury (2002:1), grammar is a language study of the possibility in forming a sentence. Grammar is a process for making a speaker's or writer's meaning clear when contextual information is unclear. In

addition, according to Ur (2009:76), grammar affects not only language combination but also the language meaning. Meaning is very important in communication. Without knowing the meaning or the message of the sentences, people will have misunderstanding meanings among them and they will not be able to communicate well.

The grammar focused in this research is the simple past tense. As mentioned in the syllabus of eighth grade of junior high school, the simple past, as one of the language features in the recount text, is included in the reading skill. The simple past indicates that an activity or situation began and ended at a particular time in the past. According to Walker & Elsworth (2000: 37-39), the usages of the simple past tense are to show: (1) complete actions; (2) past habit or regular events; (3) past situations at a point in time. Further, Murphy (1998:22-23) explains the characteristics of the simple past tense, namely: (1) often using regular past tense verbs; (2) also using irregular past tense verbs; (3) using verb be was/were. The simple past is used to show past events so that adverbs of time are needed in creating a simple past tense sentence. As mentioned by Davis & Rimmer (2011:24), there are some past time expressions that are commonly used in the simple past tense, such as yesterday, last, and ago. In this research, the researcher uses 5

indicators of the simple past tense, namely: complete action, past habit or regular event, past situation at a point in time, verb, and adverb of time.

As mentioned by Thornbury (2002:49), there are two main ways teaching grammar, namely of deductive method, and inductive method. In an inductive method, the learners study the materials from the examples then derive to the rules' understanding (Thornbury, 2002:49). In addition, Walter (2015) states that inductive method is when learners their grammar background knowledge to discover the rule from examples by themselves.

The stages of teaching grammar using Inductive Method according to Mallia (2014) are as follows: (1) students read a text which contains activities that fully reflected to the learners' experiences; (2) they translate the text; (3) they then underline all verbs, sorting them into two categories which are Verb 1 and Verb 2; (4) students are given a verb template to fill based on language forms 'Verb 2' in the text; (5) students are guided by the teacher though the use of brief notes that helped them to discover the use of simple past; (6) the students then tackle a gap-filled exercise; (7) then they produce 'real life' sentences; (8) the students have to choose between the simple present and past tense; (9) the last all students are tested.

There are pros and cons of using this method. Hird (2015) states that inductive method that contains student-centered nature is more effective because it makes students actively involved in the teaching-learning process. activities in the inductive method may help the students to deeper understanding. It also helps the students to fix the language they learned. The strategy of noticing that is used in the inductive method can increase the students' autonomy and motivation. However, Inductive Method has some weaknesses. As stated by Patel & Jain (2008:143-144), that the disadvantages of Inductive Method are as follows: (1) this method is not effective in overcrowded classes; (2) the teacher must focus on the students' process rather than the students' score; (3) the teacher has to use modern method of teaching language; (4) not all teachers can use this method well.

Meanwhile. Hird (2015)states that deductive method is a topdown approach which starts from general to specific material. A deductive approach involves the learners being given a general rule, which is then applied to specific language examples and honed through practice exercise. addition, Walter (2015) states that deductive method is when the teacher explains the material from the beginning of learning process.

The teaching stages of grammar using Deductive Method according to Mallia (2014) are as follows: (1) the teacher gives an explanation about the simple past tense; (2) the teacher demonstrates the rules for forming and using the verbs; (3) students are given a reading text; (4) students then translate the text; (5) students underline all verbs, sorting into two categories, Verb 1 and Verb 2; (6) students identify the simple past verbs and then categorize them into positive, negative, and interrogative; (7) students complete a gap-filled exercise; (8) students produce 'reallife' sentences; (9) last, students are given tests.

Deductive Method may be effective because: (1) this method can be applied in crowded classes; (2) the learners learn the difference between their first language and their language target; (3) the learner can make a grammatical question easily; (4) learner can understand material easily. However, Deductive Method has some weaknesses such as: (1) this method makes students learn about language instead of learn how to use the language; (2) this method lacks of communicative activities; (3) the learners passively receive the material; (4) the learners have no important role; and (5) the teacher rarely uses many teaching media. (Patel & Jain, 2008:142-143).

A research about the effectiveness of Inductive and

Deductive Methods has done before by Alzu'bi (2015). The aim of this research was to know which of these two methods has a positive effect on the grammar teaching models. The participants were university students and elementary school students. The experimental group and the control group were chosen at each level of the students randomly. This research used post-test achievement in order to know which one is more effective. The result of this research showed that the mean scores of Inductive Method's groups for both university students and elementary students were higher than the mean scores of Deductive Method's groups. For the university students, the mean score of Inductive Method's group was 37.38, while the mean score of Deductive Method's group 31.48; and for the elementary students, the mean score of Inductive Method's group was 36,45 and the Deductive Method's group 28.95.

Grammar is as important as the four main skills so that it also needs to be mastered by the learners. Without knowing the grammar, a person will not be able to understand the meaning. There are two main ways of teaching grammar according to Hird (2015), namely Inductive Method and Deductive Method. Further, Hird (2015) states that in Inductive Method, the students learn to notice, identify, and analyze the rule by themselves. This method is a

student-centered lesson where the students do some activities in class with teacher guidance. In order to recognize the rule, they have to be actively involved in the learning process so that they will be able to master the rule in deep understanding which is why Inductive Method is more communicative and effective. Meanwhile, Hird (2015)explains that in Deductive Method, students learn the rule after being explained by the teacher. After that, they will apply the rule by doing practices with teacher guidance and then they will have an exercise for their self. With these activities, the lesson will be more time-saving. This method is teacher-centered because during the learning process the students are more passive. Therefore, Inductive Method is better to be applied because students are actively involved and they understand materials better.

Hence, the hypotheses proposed in this study are: (1) there is a significant difference in the achievement of grammar mastery between the students taught using Inductive Method, and those taught using Deductive Method; (2) the students taught using Inductive Method have higher achievement than those taught using Deductive Method.

## RESEARCH METHOD

The method used in this research is an experimental method

with a pretest-posttest design. As stated by Srinagesh (2006:47), the purpose of an experiment is to collect data, which, in turn, to be analyzed to derive inferences. The emphasis of this experimental study is to examine the differences of the experimental group after given treatment and the control group where the experimental group was taught using Inductive Method and the control group was taught using Deductive Method. This

research uses the Pretest-Posttest design in which, according (2005:158),Mackey & Gass pretest/posttest design means to use pretest to ensure the groups' comparability, know to the knowledge level of students, while posttest is used to measure the students' learning achievement. Pretest/posttest design can be shown in table 1.

**Table 1: Pretest/Posttest Design** 

| Time 1  | Time 2                                   | Time 3   |
|---------|--|----------|
| Pretest | Experimental Treatment (X <sub>1</sub> ) | Posttest |
| Pretest | No Treatment (Controls) $(X_2)$          | Posttest |

In this research,  $X_1$ was the group that was taught using Inductive Method and X<sub>2</sub> was the group that was taught using Deductive Method. The two groups were taken from the same level, taught with the same material, in the same period of time, and by the same teacher. The participant posttest achievements were compared and found the differences among two groups.

This research was conducted at the eighth grade of SMP Negeri in Surakarta in the academic year of 2017/2018. The researcher took two classes as the sample. Those classes were class VIII-A as the experimental group who were taught using Inductive Method and VIII-B

as the control group who were taught using Deductive Method.

The researcher used t-test formula in analyzing the data to compare the two methods, Inductive Method and Deductive Method. As the prerequisite for the t-test formula, firstly the data have to be tested using normality and homogeneity test.

# RESEARCH RESULT AND DISCUSSION

The data which were analyzed in this research are pre-test and post-test scores of the two groups, experimental and control group. The pre-test and post-test scores of both groups were compared by using t-test formula to prove whether there is a significant difference between the two groups in grammar mastery and to find which

group has a higher score in grammar mastery.

The data of the pre-test of the experimental class show that the

highest score is 52, while the lowest score is 28, the mean is 37.64, the mode is 36.50, the median is 37.17, and the standard deviation is 15.46.

Table 2: The Frequency of Distribution of Pre-test Scores of the Experimental Group.

| Class Limits | Class Boundaries | Midpoint | Tally                | Frequency | Percentage |
|--------------|------------------|----------|----------------------|-----------|------------|
| 26-30        | 25.5 – 30.5      | 28       | III                  | 3         | 10.71      |
| 31-35        | 30.5 - 35.5      | 33       | <del>IIII</del> III  | 8         | 28.57      |
| 36-40        | 35.5 - 40.5      | 38       | <del>IIII</del> IIII | 9         | 32.14      |
| 41-45        | 40.5 - 45.5      | 43       | ₩                    | 5         | 17.86      |
| 46-50        | 45.5 - 50.5      | 48       | II                   | 2         | 7.14       |
| 51-55        | 50.5 – 55.5      | 53       | I                    | 1         | 3.57       |
| Total        |                  |          |                      | 28        | 100        |

The data of the pre-test of control group show that the highest score is 56, while the lowest score is

8, the mean is 43, the mode is 45.5, the median is 44.67, and the standard deviation is 23.20.

Table 3: The Frequency of Distribution of Pre-test Scores of the Control Group.

| <b>Class Limits</b> | Class Boundaries | Midpoint | Tally                   | Frequency | Percentage |
|---------------------|------------------|----------|-------------------------|-----------|------------|
| 1-10                | 0.5 - 10.5       | 5.5      | I                       | 1         | 3.57       |
| 11-20               | 10.5 - 20.5      | 15.5     | I                       | 1         | 3.57       |
| 21-30               | 20.5 - 30.5      | 25.5     | -                       | 0         | 0          |
| 31-40               | 30.5 - 40.5      | 35.5     | <del>IIII</del> II      | 7         | 25         |
| 41-50               | 40.5 - 50.5      | 45.5     | III <del>IIII</del> III | 12        | 42.86      |
| 50-60               | 50.5 - 60.5      | 55.5     | <del>IIII</del> II      | 7         | 25         |
| Total               |                  |          |                         | 28        | 100        |

As the requirement of t-test formula, the data needed to be tested for the normality and homogeneity, and similarity. The data must be normal and homogeneous in post-test scores. The normality testing used in

this research is Liliefors testing at the level of significance of 0.05 ( $\alpha$  = 0.05), while the homogeneity testing used Bartlet formula at the level of significance of 0.05 ( $\alpha$  = 0.05).

Table 4: Result of the Normality Test of Pre-test Scores

| No | <b>Teaching Method</b> | Number of Sample | df | L. value | Conclusion |
|----|------------------------|------------------|----|----------|------------|
|----|------------------------|------------------|----|----------|------------|

experime had uctive Method control group are in normal distribution. In the data of the experimental group, it can be seen that  $L_0$  is 0.1105. It is consulted with  $L_t$  for n=28 at the level of significance of 0.05 ( $\alpha=0.05$ ) = 0.1674. Because the value of L observation is lower than L table ( $L_0 < L_t$ ), it can be concluded that the data of the experimental group are in normal distribution.

Meanwhile, the data of the control group shows that  $L_o$  is 0.1172. It is consulted with the  $L_t$  for n=28 at the level of significance of 0.05 ( $\alpha=0.05$ )= 0.1674. Because the value of  $L_o$  is lower than  $L_t$  ( $L_o < L_t$ ), it can be concluded that the data of control group are in normal distribution.

The homogeneity testing that is used in this research id Bartlet formula. From the computation of homogeneity test of pre-test, it can be seen that  $\chi^2 = 3.7039$  is lower than  $\chi^2 = 3.841$  or  $\chi^2 < \chi^2$ . Because  $\chi^2$  is lower than  $\chi^2$ , it can be concluded that the data are homogeneous.

The sample used in this research should come from the same level of population and have no significant difference in the grammar mastery. To prove that the two groups have no significant

difference, the researcher used test 28 formula. Null'hypothes 185 (Ho) states

that there is no significant difference  $^{28}$  in the grammar mastery between the two classes, while the Alternative hypothesis ( $H_a$ ) states that there is a significant difference in grammar mastery between the two classes. Null hypothesis ( $H_o$ ) is rejected if  $t_o$  >  $t_t$  ( $t_{observation}$  >  $t_{table}$ ) for degree of freedom df = n1 + n2 - 2 and the level of significance  $\alpha = 0.05$ . On the

The result of the computation (t-test) shows that the  $t_{observation}$  ( $t_o$ ) is 0.9574 while the  $t_{table}$  ( $t_t$ ) for the degree of freedom 54 and the level of significance  $\alpha = 0.05$  is 2.0049. It can be seen that the  $t_{observation}$  ( $t_o$ ) is lower than the  $t_{table}$  ( $t_t$ ), which means that the null hypothesis  $H_o$  is accepted. It can be concluded that there is no significant difference in grammar mastery between the two classes (the computation can be seen in appendix 1).

contrary, if  $t_o < t_t (t_{observation} < t_{table})$   $H_o$  is

accepted.

The data of the post-test scores of the experimental group show that the highest score is 84, while the lowest score is 36, the mean is 56.57, the mode is 55.12, the median is 55.50, and the standard deviation is 22.75.

Normal

Normal

Table 5: The Frequency of Distribution of Post-test Scores of the Experimental Group.

| Class Limits | Class Boundaries | Midpoint | Tally                | Frequency | Percentage |
|--------------|------------------|----------|----------------------|-----------|------------|
| 31-40        | 30.5 - 40.5      | 35.5     | Ш                    | 5         | 17.86      |
| 41-50        | 40.5 - 50.5      | 45.5     | IIII                 | 4         | 14.29      |
| 51-60        | 50.5 - 60.5      | 55.5     | <del>IIII IIII</del> | 10        | 35.71      |
| 61-70        | 60.5 - 70.5      | 65.5     | III                  | 3         | 10.71      |
| 71-80        | 70.5 - 80.5      | 75.5     | IIII                 | 4         | 14.29      |
| 81-90        | 80.5 - 90.5      | 85.5     | II                   | 2         | 7.14       |
| Total        |                  |          |                      | 28        | 100        |

The data of the post-test show that the highest score is 80, while the lowest score is 28, the mean is 47.64,

the mode is 44.25, the median is 46.06, and the standard deviation is 18.43.

Table 6: The Frequency of Distribution of Post-test Scores of the Control Group.

| Class Limits | Class Boundaries | Midpoint | Tally             | Frequency | Percentage |
|--------------|------------------|----------|-------------------|-----------|------------|
| 21-30        | 20.5 - 30.5      | 25.5     | III               | 3         | 10.71      |
| 31-40        | 30.5 - 40.5      | 35.5     | <del>IIII</del> I | 6         | 21.43      |
| 41-50        | 40.5 - 50.5      | 45.5     | HH IIII           | 9         | 32.14      |
| 51-60        | 50.5 - 60.5      | 55.5     | IIII              | 4         | 14.29      |
| 61-70        | 60.5 - 70.5      | 65.5     | IIII              | 4         | 14.29      |
| 71-80        | 70.5 - 80.5      | 75.5     | II                | 2         | 7.14       |
| Total        |                  |          |                   | 28        | 100        |

The result of the normality test of post-test can be seen in the table below.

Table 7: The Result of the Normality Test of Post-test Scores

| No | Tl: M-4bJ              | Number of Sample | .16  | L. value |        | C 1 :      |
|----|------------------------|------------------|------|----------|--------|------------|
| •  | <b>Teaching Method</b> |                  | df - | Lo       | Lt     | Conclusion |
| 1. | Inductive Method       | 28               | 27   | 0.1317   | 0.1674 | Normal     |
| 2. | Deductive Method       | 28               | 27   | 0.1623   | 0.1674 | Normal     |

It shows that the data of both experimental group and control group are in normal distribution. In the data of the experimental group, it can be seen that  $L_o$  is 0.1317. It is consulted with  $L_t$  for n=28 at the level of significance of 0.05 ( $\alpha=0.05$ ) = 0.1674. Because the value of L observation is lower than L table ( $L_o < L_t$ ), it can be concluded that the

data of the experimental group are in normal distribution.

Meanwhile, the data of the control group shows that  $L_o$  is 0.1623. It is consulted with the  $L_t$  for n=28 at the level of significance of 0.05 ( $\alpha=0.05$ ) = 0.1674. Because the value of  $L_o$  is lower than  $L_t$  ( $L_o < L_t$ ), it can be concluded that the data

of control group are in normal distribution.

From the computation of homogeneity test of post-test in appendix 4, it can be seen that  $\chi^2 = 0.027$  is lower than  $\chi_t^2 = 3.841$  or  $\chi_o^2 < \chi_t^2$ . Because  $\chi_o^2$  is lower than  $\chi_t^2$ , it can be concluded that the data are homogeneous.

After finding out the result of the prerequisite tests, the researcher then calculated the t-test to test the first hypothesis. To test whether the first hypothesis is accepted or not, the researcher used t-test formula. The data which are analyzed in this research are post-test scores of the two groups, the experimental group and the control group.

Null hypothesis  $(H_o)$  states that there is no significant difference in the grammar mastery between the two classes, while the Alternative hypothesis  $(H_a)$  states that there is a significant difference in grammar mastery between the two classes. Null hypothesis  $(H_o)$  is rejected if  $t_o > t_t$   $(t_{observation} > t_{table})$  for degree of freedom df = n1 + n2 - 2 and the level of significance  $\alpha = 0.05$ . On the contrary, if  $t_o < t_t(t_{observation} < t_{table})$   $H_o$  is accepted.

The result of the computation (t-test) shows that the  $t_{observation}$  ( $t_o$ ) is 2.2842 while the  $t_{table}$  ( $t_t$ ) for the degree of freedom 54 and the level of significance  $\alpha = 0.05$  is 2.0049. It can be seen that the  $t_{observation}$  ( $t_o$ ) is higher than the  $t_{table}$  ( $t_t$ ), which means that the null hypothesis  $H_o$  is rejected. It can be concluded that there is a

significant difference in grammar mastery between the two classes (the computation can be seen in appendix 5).

Therefore, there is a significant difference in grammar mastery between students taught using Inductive Method and students taught using Deductive Method.

The second hypothesis of this research is that the students taught using Inductive Method have higher achievement than those taught using Deductive Method. In this case, to test the second hypothesis, researcher needs to compare the post-test mean scores of the two groups. The mean score of the experimental group is 58 29 Meanwhile, the mean score of the control group is 46.86. Hence, the Inductive Method is more effective than Deductive Method.

The result of the research shows that there is a significant difference in grammar achievement between the students taught using Inductive Method and those taught using Deductive Method ( $\mu_1 \neq \mu_2$ ). Inductive Method gives higher improvement than Deductive Method ( $\chi_1 > \chi_2$ ).

The result of analysis can be clarified by the following reasons. It has been explained in chapter II that is stated by Hird (2015) that Inductive Method makes students to observe, detect, formulate hypotheses and draw conclusions. Rather than passively receive materials from the teacher, this

approach gives the students a chance to get actively involved in the teaching-learning process. By providing them with examples that related to their own experience, it makes students to discover the rule in an organized manner. Beside it demands students' individual effort to comprehend every example the students observe. Thus, Inductive Method is more effective and communicative.

Inductive Method can be an effective way to introduce grammar to students with the bottom-up approach, moving from the more specific to the more general. Generally, as Thornbury (2002:54) proposes that Inductive Method is more favorable because: discovering the rules by themselves fits their 'existing mental structure', that the rules are more meaningful, memorable. and serviceable: (2) involving the students' personal experience may make 'a greater degree of cognitive depth and memorability'; (3) actively involving students in teaching learning process can increase the students' participation and (4) challenging motivation: the students with 'pattern-recognition and problem solving ability' is more suitable with the students' interest; (5) doing the collaborative activities in the class can make students have opportunities to practice language; (6) discovering the rules by themselves makes the students more confident and independent.

In addition, the result of this research shows that there is a significant difference in grammar achievement between students taught using Inductive Method and those taught Deductive Method. Hence, the teaching grammar using Inductive Method is more effective than the teaching grammar using deductive Method.

#### **IMPLICATION**

The result of the research shows that inductive method can give better achievement in grammar than deductive method. The conclusion has some implication as follow:

the inductive method can be applied to teach grammar to the students of junior high school, especially for the eighth-grade students. In the inductive method, the students learn to observe, detect, formulate, and draw conclusions from examples that are consisted of students' lifestyle patterns actively that help students have a better understanding in grammar mastery.

the inductive method builds more students' motivation and confidence because inductive method gives a chance to the students to discover the rules by themselves. It is necessary because the teacher does not present the rules implicitly but they have to complete the task and make sure that all members of their group do likewise. The students

discuss the material to be learned with another, help each other to understand it, and encourage the group members to do their best so that they do more activities. Students are actively involved in teaching learning process because involving the students in teaching learning process makes the students have an important role in it so that the students feel confident and motivated

# CONCLUSION AND SUGGESTION

The conclusions of this research are as follows: (1) there is a significant difference in teaching grammar between students taught using Inductive Method and those taught using deductive Method to the eighth grade students of SMP Negeri in Surakarta at the academic year of 2017/2018; (2) Inductive Method is more effective to be applied in teaching grammar than deductive Method.

Having concluded the result of the research, the researcher would like to propose some suggestions. To English teachers, when applying Inductive Method, the teacher needs to consider several things such as: the text that is used has to be fully reflected in the students' life or experience, the activities in the class have to be various, and while teaching-learning process, teacher has to guide and motivate the students. To the English students, the student needs have more

confidence to convey their ideas so that the teacher knows whether their findings are relevant or not and how deep their understanding is. The last, to the other researcher, the researcher is aware that her research is not perfect yet so that the other researcher may find more suitable stages of Inductive Method that have more variant activities so that the students will be more motivated in teaching-learning process.

### **BIBLIOGRAPHY**

Alzu'bi, A. M. (2015). Effectiveness of Inductive and Deductive Methods in Teaching Grammar. Advances in Language and Literary Studies. Retrieved from: http://dx.doi.org/10.7575/a iac.alls.v.6n.2p on July 30th, 2017.

Beaumont, Robin. (2009). *Research Methods & Experimental Design*. Retrieved from: http://www.floppybunny.or
g/robin/web/virtualclassro
om/chap16/s1/sembk2.pdf
on April 30<sup>th</sup>, 2017.

Davis, Fiona & Rimmer, Wayne.
(2011). Active Grammar.
Retrieved from:
https://www.slideshare.net/
memyselfandmycountry/ac
tive-grammar-1-61771382.

Díaz, Grabiel & Maggiolli. (2004).

Teacher-Centered

Professional Development.

Retrieved from:

http://en.bookfi.net/book/1 040693 on May 2<sup>nd</sup>, 2017.

teaching/ on January 31st,

- Hird, John. (2015). *Inductive and deductive grammar teaching: what is it, and does it work?*. Retrieved from:

  https://oupeltglobalblog.com/2015/04/24/inductive-and-deductive-grammar-
- 2017. Jalani, Noor, Hisham & Sern, Lai, Chee. (2015). Efficiency Comparisons between Example-Problem-Based Learning and Teacher-Centered Learning in the of **Teaching** Circuit Theory. Procedia Social and Behavioral Sciences, 205, *153-163*. doi:10.1016/j.sbspro.2015.
- Mackey, Alison & Gass, Susan, M. (2005). Second Language Research Methodology and Design. Retrieved from:
  http://en.bookfi.net/book/1 261562 on April 11th, 2017.

08.128.

Mallia, Joseph, George. (2014).
Inductive and Deductive
Approaches to Teaching
English Grammar. *Arab*World English Journal,
Pp.221-235. ISSN: 22299327.

- Murphy, Raymond. (1998).

  Grammar in Use.

  Retrieved from:

  http://en.bookfi.net/book/1

  183696 on April 7<sup>th</sup>, 2017.
- Patel, M, F & Jain, Praveen, M. (2008). English Language Teaching (Methods, Tools & Techniques). Retrieved from:
  - http://en.bookfi.net/book/1 098595 on April 6<sup>th</sup>, 2017.
- Srinagesh, K. (2006). *The Principles of Experimental Research*.
  Retrieved from:
  http://en.bookfi.net/book/1
  141684 on June 15<sup>th</sup>, 2017.
- Thornbury, Scott. (2002). *How to teach Grammar*. Retrieved from:

  https://www.slideshare.net/doctorwonk/thornburys-how-to-teach-grammar on April 6<sup>th</sup>, 2017.
- Ur, Penny. (2009). *A Course in Language Teaching*. Retrieved from: https://sacunslc.files.word press.com/2015/03/penny-ur-a-course-in-language-teaching-practice-of-theory-cambridge-teacher-training-and-development-1996.pdf on April 7<sup>th</sup>, 2017.
- Walker, Elaine & Elsworth, Steve. (2000). *Grammar Practice*

for Upper Intermediate
Students with Key.
Retrieved from:
http://en.bookfi.net/book/4
66220 on April 10<sup>th</sup>, 2017.
Walter, Catherine. (2015). British
Council. Teaching
Grammar Inductively.

Retrieved from: https://englishagenda.britis

 $\begin{array}{lll} hcouncil.org/ & on & January \\ 31^{th}, 2017. & & \end{array}$