

## THE EFFECT OF INDUCTIVE AND DEDUCTIVE METHODS ON THE STUDENTS' ABILITY IN GRAMMAR AT FIRST YEAR OF MADRASAH TSANAWIYAH AL-ITTIHADIYAH MEDAN

Indri Harmaili lubis

Dosen STAI Bahriyatul 'ulum Pandan

Email : indriharmaili89@gmail.com

### ABSTRACT

*This research aimed to identify the students' ability in grammar, to describe the effect of using inductive and deductive methods as independent variable (X), and the students' ability in grammar as dependent variable (Y). There was a significant difference of using inductive and deductive methods on the students' ability in grammar. The method that used in this research was a quasi experimental study. The population in this research were 130 students at the seventh grade of MTS Al-Ittihadiyah, Medan consists of five classes, class VII-1, VII-2, VII-3, VII-4, and VII-5. And the samples were 26 students in VII-3 and 25 students in VII-5. The technique of collecting data was test. And the research data were analyzed by applying t-test formula. The result of data analysis by using t-test showed the value of  $t_{observed}$  is 2,149 with degree of freedom 49 in significant degrees 0.05 (5%), and  $t_{table}$  is 1.674. It meant that to  $t_{table} < t_{observed}$  is higher than  $t_{table}$ ). On the other hand, the null hypothesis ( $H_0$ ) is rejected, and alternative hypothesis ( $H_a$ ) is accepted. It showed that teaching grammar especially in past tense, quantifier and preposition by using inductive method more effective than deductive method.*

**Keywords:** The Effect, Inductive Method, Deductive Method, Grammar.

### 1. INTRODUCTION

Grammar is one of the sub-skills that influence our progress in learning English. Learning grammar means that we learn about the structure of the English and know the parts of grammar itself that can help us to make sentences in written or spoken and to understand any kind of texts or sentences that we hear or read.

Grammar is crucially important in English language. Student should be able to make sentences well and suitable to their rules. It means, the rule or grammar in English is very necessary and important. English is stated as good if the sentences suitable to their rules in grammar. Like the rule in tenses, preposition, word order, and etc.

Many factors cause the low ability in grammar. One of them is English teachers did not creative in applying teaching strategy, the teacher taught that in teaching grammar could be done in the simple way from time to time or the teacher use the same way in learning process. The students often thought that learning English was difficult, boring, and they had not lived in England but Indonesia. Therefore it will make their ability be down. Even their ability to mastery English will be lost.

Strategy is a way that the teacher used in teaching. Moreover, strategy can be defined as a former of plan or an aim to achieve a specific purpose to gain advantage. There are many kinds of strategy in teaching as jigsaw, mind mapping, think pair and share, debate, inductive, role playing and deductive methods.

Inductive method refers to a process of going from specific examples to rule, generalization, or a broad principle. It was taught to produce correct sentences both written and orally. In other words, the sequence in this method goes from creating a situation and giving examples to the generalization where students should discover such generalization by themselves or with the teacher's help.

The deductive method refers to the style of teaching students by introducing the grammatical rules first, and then applying them by the students. Teacher explanation often dominates classroom activities, and student involvement and interaction is often minimized. It was presented directly in text books. Therefore, that the learners obtained the rules of language first.

Both inductive and deductive methods are usually applied in teaching grammar. The inductive and deductive methods have been

widely studied in the field of second language acquisition.

Therefore, I would do the research about the title “The Effect of Inductive and Deductive Methods on the Students’ ability in Grammar”.

## 2. REVIEW OF LITERATURE

### Ability in Grammar

According to Martin H. Manser, Ability is a power, and Allyn and Bacon say that Ability is potential capacity or power to do something physical or mental or special nature power to do something well.<sup>1</sup>

Grammar of a language is the description of the ways in which words can change their forms and can be combined into sentence in that language.<sup>2</sup>

Grammar ability, can be concluded, is the potential capacity or power to describe and master the ways in which words can change their forms and can be combined into sentence in that language.

### Inductive Method

The inductive refers to a process of going from the specific example to the generalization, or a broad principle. The inductive method emphasizes learning discovery, where students generalize rules from a large amount of underlying examples. The teacher functions as a counselor and presents grammar rules after students have already noticed the target features of the language through participating in tasks. Therefore, the inductive method moves from specific instances of language use to general rule explanation.<sup>3</sup>

Don Snow favors this method because problem solving makes students more active participants in the learning process; he also suggests it because a deductive approach may lead the teacher into overly long and elaborate grammar lectures. An inductive method allows student to try a structure out before the teachers explain it, thus giving the teacher a chance to assess what problem they have with it and what

needs to be explained.<sup>4</sup> Knowing that they can work out the rules from examples by themselves greatly increases learners’ motivation, makes them attentive, more actively involved in and confident and enthusiastic about the learning process rather than simply passive recipients, and at the same time contributes to its effectiveness.<sup>5</sup> During the process, the teacher begin with the learner’s experiences until a tentative generalization or hypothesis is stated which is later analyzed for acceptance, rejection or modification.<sup>6</sup> In general, De Keyser said that inductive techniques tend to adopt a naturalistic approach.<sup>7</sup>

There are three steps of implementation in teaching grammar inductively; (a) Presentation of example and illustrate in a systematic way, (b) Observation and analysis the example, (c) Generation of rules.<sup>8</sup>

a. Presentation of example and illustrate in a systematic way

When teachers use inductive method in teaching grammar, they should give the examples at the first time before giving the formula or rule. They give some examples that make sense or contextual in order to make students can understand that matter easily.

b. Observation and analysis the example

After teachers give the examples, teacher and students analyze the example

c. Generation of rules.

It can be teachers that state the rule and guide their students in identifying the rule, or students can formulate the rule by themselves.

Here is the example of teaching simple present tense by using inductive method:

<sup>4</sup> Snow, Don. *From Language to Language Teacher*, (Alexandria: Capitol Communication Systems, 2007), p, 189

<sup>5</sup> Mohammad Akram Alzu’bi, Effectiveness of Inductive and Deductive Methods in Teaching Grammar, *Advances in Language and Literary Studies*, Vol. 6, 2015, ISSN: 2203 - 4714, p, 188, accessed on Monday, January 18th 2016 at 12.45 p.m, (<http://www.journals.aiac.org.au/index.php/alls/article/view/1392/1362>)

<sup>6</sup> Vernon S, Gerlach and Donald P. Ely, *Teaching and Media a systematic approach*, (New Jersey: Prentice Hall, second edition), p, 80

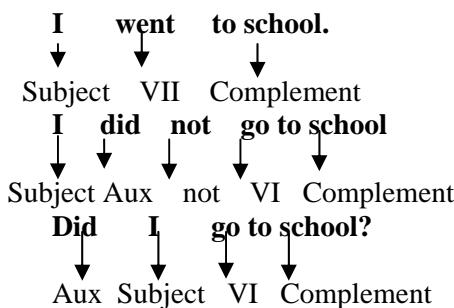
<sup>7</sup> Samaneh Negahdaripour and Ali Amirghassemi, The Effect of Deductive vs. Inductive Grammar Instruction on Iranian EFL Learners’ Spoken Accuracy and Fluency, *International Journal of Applied Linguistics & English Literature*, Vol. 5, 2016, ISSN 2200-3592 (Print), ISSN 2200-3452 (Online), p, 8, accessed on Friday, January 15<sup>th</sup> 2016 at 09.30 a.m, (<http://www.journals.aiac.org.au/index.php/IJALEL/article/view/1956/1767>)

<sup>8</sup> Singh, Y. K. *Teaching of English*, (New Delhi: APH Publishing Corporation, 2007)p,177

<sup>1</sup> Allyn and Bacon, *Psychology The Science*, (London: Longman,1964)p.2

<sup>2</sup> Jeremy Harmer, *The Practice of English Language Teaching*, (England: Longman, 2003), p,12

<sup>3</sup> Pei-ling Wang, Teaching and Learning English Verb Tenses in a Taiwanese University, *English Linguistics Research*, Vol. 1, 2012, E-ISSN 1927-6036, p, 20, accessed on Friday, January 15<sup>th</sup> 2016 at 09.30 a.m,



According to Thornbury, these are the advantages of inductive method: (1) Rules learners discover for themselves are more likely to fit their existing mental structure than rules they have been presented with. This in turn will make the rules more meaningful, memorable, and serviceable; (2) the mental effort involved ensures a greater degree of cognitive depth which, again, ensures greater memorability; (3) Students are more actively involved in the learning process, rather than being simply passive recipients: they are therefore likely to be more attentive and more motivated; (4) It is an approach which favors pattern-recognition and problem-solving abilities which suggests that it is particularly suitable for learners who like this kind of challenge; (5) If the problem-solving is done collaboratively, and in the target language, learners get the opportunity for extra language practice' (7) Working things out for themselves prepares students for greater self-reliance and is therefore conducive to learner autonomy<sup>9</sup> (8) helps students to understand and establish the English grammatical rule system in a way that is simple, logical, and also consistent with their intuition or grammatical judgments about the sentence well formedness and sentence structure.<sup>10</sup>

According to I Ketut Trika Adi Anaand and Ni Made Ratminingsih The advantages of inductive method are: (1) it may take a longer time until the learners could discover the rule compared to teaching using deductive approach; (2) the time and energy spent in working out the rules may mislead the learners that their main objective of studying the language is mastering the rules not the meaning; (3) learners may

hypothesize the wrong rule, or their understanding may be to broad or narrow from what it is expected; (4) it may make the learners who accustom with deductive approach become frustrated, since they may expect to be given the rules directly;<sup>11</sup> (5) it can place heavy demands on teachers in planning a lesson. They need to select and organize the data carefully so as to guide learners to an accurate formulation of the rule, while also ensuring the data is intelligible; (6) However, carefully organized the data is, many language areas such as aspect and modality resist easy rule formulation.<sup>12</sup>

### Deductive Method

Teaching through deductive method is still popular to be used. A deductive method starts with the presentation of a rule and is followed by example in which the rule is applied.<sup>13</sup> It is important to stress that the deductive method is not necessarily dependent on translation. In fact, many popular student grammar practice books adopt a deductive approach, with all their explanations and exercises in English.<sup>14</sup> The procedure is direct and teacher-fronted, but by eliciting the rule rather than telling the students, the teacher introduces an element of discovery learning, albeit heavily guided.<sup>15</sup> ). In this method, the teacher is the centre of the class and is responsible for all the presentation and explanation of the new material.<sup>16</sup>

According to Sigh the processes of deductive method are: (1) Generation of rules; (2) Verification and application of the rules by observation and analysis; (3) Practice of the examples of the rules.<sup>17</sup>

#### a. Generation of rules

At the first presentation, teachers state the rule or the pattern that they want to teach to their students. It can be written or oral.

<sup>9</sup> Scott Thornbury, *How to Teach Grammar*, (England: Bluestone Press, 2005, p. 54

<sup>10</sup> Zhou Ke. An Inductive Approach to English Grammar Teaching, *HKBU Papers in Applied Language Studies*, Vol. 12, 2008, p. 17, accessed on Monday, January 11<sup>st</sup> 2016 at 06.15 p.m, ([http://lc.hkbu.edu.hk/book/pdf/v12\\_01.pdf](http://lc.hkbu.edu.hk/book/pdf/v12_01.pdf))

<sup>11</sup> I Ketut Trika Adi Ana and Ni Made Ratminingsih Ana, Teaching English Tenses to EFL Learners: Deductive or Inductive?, *International Journal for Cross-Disciplinary Subjects in Education (IJCSE)*, volume 2, 2012 , accessed on Friday, January 15<sup>th</sup> 2016 at 09.30 a.m, (<http://infonomics-society.ie/wp-content/uploads/ijcse/published-papers/special-issue-volume-2-2012/Teaching-English-Tenses-to-EFL-Learners-Deductive-or-Inductive.pdf>)

<sup>12</sup> Scott Thornbury, Op. cit., p. 54

<sup>13</sup> Ibid, p. 29

<sup>14</sup> Ibid, p. 30

<sup>15</sup> Jacqueline Gollin, Deductive vs. inductive language learning, *ELT Journal* , Vol. 52/1, 1998, p. 88, accessed on Monday, January 11<sup>st</sup> 2016 at 09.00 a.m, (<http://eltj.oxfordjournals.org/content/52/1/88.full.pdf>)

<sup>16</sup> Zhou Ke, ibid, p. 18

<sup>17</sup> Y.K.Singh, op. cit., pp. 177

b. Verification and application of the rules by observation and analysis

After teachers state the rule and give the examples in a sentence, students make the other sentence by themselves which is based on the rule that teachers stated.

c. Practice the new pattern

When understanding the pattern or rule, students are expected to do more practice about that new pattern. Therefore they can memorize the rule and easy to make sentences in written or oral.

The examples of teaching past tense that is taught deductively:

- Teacher gives the rule first:

The formula =

**Subject + Verb II + Object/Complement**

- Then teacher explains about the rule: what are past tense , use, rule.
- And he gives the examples, for instance: I drove a car.

He cooked the cake.

I read a book

On the other hand, students have to remember the rule of simple past tense to practice their writing in the exercises.

In order to be able to implement this method well, teachers who are going to apply this method should know the benefits and the problems that they may find during the implementation of this method. By knowing the benefits and the problems, teachers will be able to adjust this method based on the situation that is faced by the teacher.

Thornbury stated that there are some of advantages and disadvantages in teaching grammar deductively:

The advantages of deductive method are: (1) It gets straight to the point, and can therefore be time-saving. Many rules – especially rules of form- can be more simply and quickly explained than elicited from examples. This will allow more time for practice and application; (2) It respects the intelligence and maturity of many – especially adult-students, and acknowledges the role of cognitive processes in language acquisition; (3) It confirms many students' expectations about classroom learning, particularly for these learners who have an analytical learning style; (4) It allows the teacher to deal with language points as they come up, rather than having to anticipate them and prepare for them in advance.

The disadvantages of deductive method are:

- (1) Starting the lesson with a grammar

presentation may be off-putting for some students, especially younger ones. They may not have sufficient metalanguage (i.e. language used to talk about language such as grammar terminology). Or they may not be able to understand the concepts involved; (2) Grammar explanation encourages a teacher-fronted, transmission-style classroom; teacher explanation is often at the expense of student involvement and interaction; (3) Explanation is seldom as memorable as other forms of presentation, such as demonstration; (4) Such an approach encourages the belief that learning a language is simply a case of knowing the rules.<sup>18</sup> (5) Teacher's explanation which dominates the teaching and learning process may decrease the learners' interaction, Therefore the learners may become passive learners.<sup>19</sup>

### 3. METHODOLOGY OF RESEARCH

#### Population and Sample

The population of this research is the marketing students of 2015/2016 academic year which consist of 166 students. That are class VII-1 consist of 26 students, VII-2 consist of 27 students, VII-3 consists of 26 students, VII-4 consists of 26 students, VII-5 consists of 25 students. The sample of this research was 52 students. The sample was divided into two groups 26 students for experimental group and 25 students for control group. The experimental group was thought by using inductive method and the control group was thought by using deductive method. I use the cluster random sampling to determine the sample in research

#### Research Method

This research was conducted by experiment group research. The research was conducted treatment by applying the inductive and deductive methods in grammar. The method of the research is a quantitative research. The design of the research are post-test design and use a quasi-experimental research to take two classes in conducting the research; control class and experimental classes. The experimental class was taught grammar by giving treatment of inductive method and the control class was taught grammar by giving treatment of deductive method. Although these groups were treated differently, the giving the material, the length of the time and the teacher were exactly same.

<sup>18</sup> Scott Thornbury, op.cit., p. 30

<sup>19</sup> I Ketut Trika Adi Ana and Ni Made Ratminingsih, op. cit., p. 999

After conducting the treatment to the experimental and control classes for several times, I gave post test to both of the class. The post test was given in order to identify the students' ability after the treatment.

### Instrumentation

The instrument of this research is a grammar test. To construct the grammar test, I follow this procedure:

#### 1. Conceptual Definition

Grammar ability is the potential capacity or power to describe the ways in which words can change their forms and can be combined into sentence in that language.

#### 2. Operational Definition

Ability in grammar is the score that the students obtain after answering the grammar test which cover preparation.

The indicators of the students have mastered grammar were: (1) the students could know the usage of grammar they learned, (2) the students would know the role of grammar they used, (3) the student could make the correct sentence grammatically.

#### 3. Specification

The test is multiple choices which consisting of 50 items with four options, those questions based on some past tense, quantifier, and preposition. The students answer those questions based on it, because I want to classify the students' ability in grammar by using inductive and deductive methods.

#### 4. Calibration.

##### a. Validity

**Table 1. The Summary of Validity Test**

Result	Number of Items	Total
Valid	1,3,4,5,7,8,9,10,11,12,14,15,16,17,18, 21,22,23,25,26,27,28,30,31,32,33,34,35,38,39, 41,42,43,44,45,47,48,49,50,51,52,53,55,56,57, 58,59,60	50
Invalid	2,6,13,19,20,24,29,36,37,40,46,54	12
Total		62

##### b. Reliability

**Table 2. The Reliability of the Test**

No	r	Criteria	No	R	Criteria
1	0,631	Sufficient	32	0,557	Rather Low
2	0,388	Low	33	0,623	Sufficient
3	0,619	Sufficient	34	0,617	Sufficient
4	0,7	Sufficient	35	0,581	Rather Low

5	0,580	Rather Low	36	0,142	Very Low
6	0,580	Rather Low	37	0,145	Very Low
7	0,567	Rather Low	38	0,624	Sufficient
8	0,576	Rather Low	39	0,659	Sufficient
9	0,624	Sufficient	40	0,24	Low
10	0,564	Rather Low	41	0,572	Rather Low
11	0,624	Sufficient	42	0,641	Sufficient
12	0,580	Rather Low	43	0,596	Rather Low
13	0,488	Rather Low	44	0,577	Rather Low
14	0,553	Rather Low	45	0,548	Rather Low
15	0,645	Sufficient	46	0,244	Low
16	0,536	Rather Low	47	0,625	Sufficient
17	0,55	Rather Low	48	0,555	Rather Low
18	0,629	Sufficient	49	0,61	Sufficient
19	0,625	Sufficient	50	0,639	Sufficient
20	0,132	Very Low	51	0,653	Sufficient
21	0,639	Sufficient	52	0,535	Rather Low
22	0,595	Rather Low	53	0,58	Rather Low
23	0,535	Rather Low	54	0,316	Low
24	0,356	Low	55	0,625	Sufficient
25	0,586	Rather Low	56	0,555	Rather Low
26	0,585	Rather Low	57	0,61	Sufficient
27	0,589	Rather Low	58	0,561	Rather Low
28	0,622	Sufficient	59	0,611	Sufficient
29	0,180	Very Low	60	0,622	Sufficient
30	0,539	Rather Low	61	0,580	Rather Low
31	0,581	Rather Low	62	0,575	Rather Low

### Technique of Data Analysis

Before doing hypothesis test, there are two requirements that have to be done. They are normality and homogeneity tests.

#### a. Normality Test

#### b. Homogeneity Test

### 4. RESESEARCH FINDING

#### Description of Data

**Table 3. Post-Test Score of Experiment and Control Classes**

Subject	Post-Test	Subject	Post-Test
1	58	1	86
2	66	2	86
3	60	3	78
4	80	4	88
5	70	5	76
6	82	6	74
7	58	7	50
8	90	8	40
9	64	9	64
10	94	10	72
11	96	11	58
12	90	12	64
13	96	13	72
14	48	14	48
15	78	15	68
16	80	16	66
17	90	17	70
18	50	18	60
19	94	19	60
20	80	20	80
21	56	21	56
22	74	22	68
23	80	23	58

24	40	24	66
25	78	25	56
26	72	-	-
$\Sigma$	1178	$\Sigma$	1134

Based on the above table, the lowest and the highest scores of post-test at the experimental class were 40 and 96. While the lowest and the highest scores of post-test at control class were 40 and 88. Therefore, this can be concluded that the score of post-test at experimental class was higher than the score of its post-test at control class. As visualized in a bar chart of Figure 4.1

### Result Test Data of Students' Ability

After giving the treatment in experimental class by applying inductive method and in control class by applying deductive method, I gave the post-test. The comparison of post-test scores in 2 classes can be seen in table 4 below:

**Table 4. The Score, Mean, and Standard Deviation of Post-test in Experimental and Control Classes**

Subject	Experimental Class		Control Class	
	X	F		X
1	40	1	1	40
2	48	2	2	48
3	50	1	3	50
4	56	1	4	56
5	58	2	5	58
6	60	1	6	60
7	64	1	7	64
8	66	1	8	66
9	70	1	9	70
10	72	1	10	72
11	74	1	11	74
12	78	2	12	78
13	80	4	13	80
14	82	1	14	82
15	90	3	15	90
16	94	2	16	94
17	96	2	17	96
Total	1178	26	Total	1178
Mean	74		65,28	
Standard Deviation	16		12,71	

### Analysis Requirement Testing Normality Test

Normality test was done by using Liliefors Testing. The testing normality for both of sample classes were summarized in table 5.

**Table 5. Normality Test of Post-Test in Experimental and Control Classes**

Data	The Summary of Normality Test of The Post-test			
	Class	$L_o$	$L_t$	Conclusion
Experiment	0,1068	0,174	Normal	
Control	0,0799	0,177	Normal	

This shows that the data of the two classes are normal. Referring to the table critical value for Liliefors,  $N= 26, 25$  (experiment= 26, control=25) in significant level= 0,05 can be seen that  $L_{table} \text{ is } 0,177$ . In experimental class  $L_{observation} < L_{table} = 0,1068 < 0,174$  . this was concluded that post-test is normal. And in control class  $L_{observation} < L_{table} = 0,0799 < 0,177$ . this was concluded that post-test data are normal.

### Homogeneity Test

The formula is as follows:

$$F = \frac{\text{the biggest variant}}{\text{the smallest variant}}$$

Then, the homogeneity of the sample could be decided based on this following hypothesis:

- If  $F_o < F_t$  = data are homogenous
- If  $F_o > F_t$  = data are not homogenous

From the calculation of post-test data in experimental and control classes, this was showed

- Variant of post-test in experiment class : 256
- Variant of post-test in control class : 161,63

$$F_o = \frac{256}{161,63} = 1,583$$

The coefficient of  $F_o$  from the table of F distribution with significant level = 0,05 with numerator degree of freedoms = 25 (  $N-1=26-1$  ), and denominator degree of freedom = 24 (  $N-1=25-1$  ) is 1,975.

From the calculation above, this was found that  $F_{count}$  is 1,911. Then, the coefficient of  $F_{count}$  was compared to  $F_{table}$ . This could be concluded that  $F_{count} < F_{table} = 1,58 < 1,975$ . This meant that the samples of post-test that used in this research were homogenous. Therefore, this could be concluded that the data of this research had completed the requirements to be hypothesized. This was described in table 4.7.

**Table 6. Homogeneity test of Post-Test in Experimental and Control Classes**

Homogeneity Test of The Pre-test Data				
Class	Variant	$F_{observation}$	$F_{table}$	Conclusion
Experiment	256	1,583	1,975	Homogeny
Control	161,63			

### Hypothesis Testing

The formula of t-test and table of the critical values of t-distribution was applied in testing the hypothesis. The testing hypothesis is conducted to find out whether the hypothesis is accepted or rejected. Based on the result of the

data analysis, this was found that the value of t-table is 1,677 at the level of significance 0,05 and df =49.

In this case, Testing the hypothesis test as this formula.

$$t_0 = \frac{R - T}{\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

From the computation of testing hypothesis (see appendix IV), this can be seen that the coefficient of  $t_{count}$  is 2,149 with the at the significant level of 5% and  $dk = 26 + 25 - 2 = 49$  which the real level of  $t_{table} = 1,676$  because of  $t_{count} > t_{table}$  that is  $2,149 > 1,676$  therefore, this can be concluded that hypothesis was accepted. This meant that the alternative hypothesis which I proposed about the students who are taught by inductive will be better in learning grammar than those who are taught by deductive method was accepted.

In summary that there is a significant difference between the students' ability in experimental group by inductive method and the students' ability in control group by using deductive Method.

## Discussion

The statistic data of this research about the effect of inductive and deductive methods on the students' ability in grammar showed that there is difference effect between using inductive method and using deductive method on the students' ability in grammar, the students' ability with inductive method was better than the students' ability with deductive method. It can be seen from the scores of mean. The students' ability in experimental class by using inductive method showed the mean was 74. And the students' ability in control group by using deductive method showed the mean was 65,68. It means that the students who were taught by using inductive method got higher score than the students who were taught by deductive method. Inductive method gave the higher development of students' ability in grammar.

In learning process, teaching method can influence the result of teaching. Actually, many methods can be applied in the class room. The teacher should be able to choose an appropriate method that can make their students understand the material. One of them is inductive method. An inductive method allows student to try a structure out before the teachers explain it, thus giving the teacher a chance to assess what problem they have with it and what needs to be

explained. Teacher and student are active in this method. This can push students to think and think. Because of the teacher usually motivate and ask them to give the opinion about the material. While in deductive method, the teacher is more active than the students. It may make the students are bored. Teacher had explained the material before. The students just listen and think about example and the characteristics. In summary, Thinking about the material from the example that usually used in daily life is more interesting than just listen and try to understand the material from teacher in beginning. Don Snow favors also inductive method because problem solving makes students more active participants in the learning process; he also suggests it because a deductive approach may lead the teacher into overly long and elaborate grammar lectures<sup>20</sup>.

Actually, both experiment and control classes were getting the improvement in their test. Inductive and deductive methods are effective to use in teaching grammar. But for the students AllIttihadiyah, Medan, inductive method is more effective.

My findings confirm another study on "The Effectiveness of Inductive Instruction in Teaching Simple Present Tense at the seventh Grade of SMP Islam Bait Al-Rahman" Nurbaiti Rahayu. The objective of her research was to get the empirical data of the differences between students' score of simple present tense who were taught inductively and students' score of simple present tense who were taught deductively, and to know how effective inductive instruction in teaching simple present tense. The result showed that inductive instruction was an effective instruction in teaching simple present tense. This meant that the grammar learning of students at seventh grade of MTS A-l-Ittihadiyah and the students at seventh Grade of SMP Islam Bait Al-Rahman were more effective were taught by using inductive method.

But the my findings were contradicting by the result of a previous study about "Deductive and Inductive Methods in Teaching Passive English Construction" by Risma Asriany A. G, Burhanuddin Arafah, and Abd. Hakim Yassi, "at STKIP YPUP South Sulawesi, Makassar: Department of Culture State University of Hasanuddin". The result of this study showed that the students of STKIP YPUP who learnt grammar through the deductive method was more effective to improve their

<sup>20</sup> Don Snow, op cit., p, 189

knowledge on English grammar especially English Passive Construction. This study contradicted that inductive method was more effective than deductive method. This occurs because the sample of my study and this study were different. The students of STKIP YPUP were more interested in grammar learning by using deductive method. While the students in the first grade of MTS Al-Ittihadiyah, Medan were more interested in grammar learning by using inductive method.

## 5. CONCLUSION

In the final of this research, I give some conclusion as following:

1. The students who were taught by using inductive method got higher score than the students who were taught by deductive method.
2. The students who were taught by using deductive method got lower score than the students who were taught by inductive method.
3. there is a significant difference between the students' ability in experimental class by inductive and the students' ability in control class. The calculation of t-count was higher than the t-table.
4. In this case, both experiment and control classes were getting the improvement in their post-test. Therefore, both inductive method and deductive method are effective to use in teaching grammar at the seventh grade students of MTs Al-Ittihadiyah, Medan.

## BIBLIOGRAPHY

Alzu'bi, Mohammad Akram, Effectiveness of Inductive and Deductive Methods in Teaching Grammar, *Advances in Language and Literary Studies*, Vol. 6, 2015, accessed on Monday, January 18<sup>th</sup> 2016 at 12.45 p.m, (<http://www.journals.aiac.org.au/index.php/alls/article/view/1392/1362>)

Allyn and Balcon, *PhsycoLOGY The Science*, London: Longman, 1964

Ana, I Ketut Trika Adi and Ni Made Ratminingsih. Teaching English Tenses to EFL Learners: Deductive or Inductive?, *International Journal for Cross-Disciplinary Subjects in Education (IJCDSE)*, volume 2, 2012 , accessed on Friday, January 15<sup>th</sup> 2016 at 09.30 a.m, (<http://infonomics-society.ie/wp-content/uploads/ijcdse/published-papers/special-issue-volume-2-2012/Teaching-English-Tenses-to-EFL-Learners-Deductive-or-Inductive.pdf>)

Gerlach, Vernon S and Donald P. Ely. *Teaching and Media a systematic approach*, New Jersey: Prentice Hall, second edition

Gollin, Jacqueline. Deductive vs. inductive language learning, *ELT Journal* , Vol. 52/1, 1998, accessed on Monday, January 11<sup>st</sup> 2016 at 09.00 a.m, (<http://eltj.oxfordjournals.org/content/52/1/88.full.pdf>)

Harmer, Jeremy. *The Practice of English Language Teaching*, England: Longman, 2003.

Ke, Zhou. An Inductive Approach to English Grammar Teaching, *HKBU Papers in Applied Language Studies*, Vol. 12, 2008, Accessed on Monday, January 11<sup>st</sup> 2016 at 06.15p.m, ([http://lc.hkbu.edu.hk/book/pdf/v12\\_01.pdf](http://lc.hkbu.edu.hk/book/pdf/v12_01.pdf))

Negahdaripour, Samaneh and Ali Amirghassemi, The Effect of Deductive vs. Inductive Grammar Instruction on Iranian EFL Learners' Spoken Accuracy and Fluency, *International Journal of Applied Linguistics & English Literature*, Vol. 5, 2016, ISSN 2200-3592 (Print), ISSN 2200-3452 (Online), accessed on Friday, January 15th 2016 at 09.30 a.m, (<http://www.journals.aiac.org.au/index.php/IJALEL/article/view/1956/1767>)

Singh, Y. K. *Teaching of English*, New Delhi: APH Publishing Corporation, 2007.

Snow, Don. *From Language to Language Teacher*, Alexandria: Capitol Communication Systems, 2007.

Thombury, Scort. *How to Teach Grammar*, England: Longkan, 2005

Wang, Pei-ling. Teaching and Learning English Verb Tenses in a Taiwanese University, Sciedu Press, Vol. 1, 2012, accessed on Friday, January 15<sup>th</sup> 2016 at 09.30 a.m, ([www.sciedupress.com/journal/index.php/elr/article/download/885/679](http://www.sciedupress.com/journal/index.php/elr/article/download/885/679))