

## The Effect of Teaching Models on Students' Reading Comprehension Ability at Junior High School

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### Abstract

*This research used quantitative method with the one pre-test and post-test group design. This experimental design compared two models for the students reading comprehension improvement between START model and T-A-I model. These two models of teaching are very effective and suitable for applying in the classroom to improve the ability of students' reading. Based on the research findings and discussion, the researcher concluded that Before treatment T-A-I, The ability of grade eight in reading narative text ability was low since the pre-test score were control class was 1488 and mean (average) is 52,32 and experimental class was 1580 and mean (average) was 57,2. After treatment T-A-I, their ability had been improved since the post-test, score were control class was Post test control class was 1668 and the mean (average) 62,32 post test experimental class 1580 and the mean (average) 63,3. The usage the T-A-I still give effect to students' reading comprehension in narative text on grade Seventh of SMP SW HARAPAN PEMATANGSIANTAR.*

### Keywords

Reading comprehension;  
START; TAI; Models of  
teaching



### I. Introduction

The role of communication among people in the world for business, science, economy, technology, are the most important thing in life. Realizing the important of English as spoken and written international communication, the Ministry Education of Indonesia includes English as a Compulsory subject to learn in the school. According to Rao, P (2019:7), stated that English there are some skills that students need to learn, namely: speaking, listening, reading and writing. Listening and reading skills that involve receiving messages are regarded as receptive skills. Among those skills, reading is the complex skill that must be learnt seriously by the students, as there are so many difficulties in reading. Communication is the process of delivering messages by someone to other people to tell, change attitudes, opinions or behavior either directly orally or indirectly through the media. In this communication requires a reciprocal relationship between the delivery of messages and recipients namely communicators and communicants. (Hasbullah, et al. 2018)

In the Fact student in our country have learned English since in Primary school, but we find that their English still poor. For example, at SMP HARAPAN PEMATANGSIANTAR, most of them are still having low mastery in English either in vocabulary or in reading comprehension, when they read some text books that written in English, they will feel difficult in comprehending the English text.

Cross and Stedman, (1996) states that reading comprehension means that understanding, evaluating, and utilizing the information and ideas gained through an interaction between and author and a reader in which the written language becomes through the medium of print. Furthermore, Alexander (1998:160) states that

comprehension is a special thinking process. The readers comprehend by actively instructing meaning in internally from internally from interacting with the material that is read.

According to Anderson, Hiebert, and Wilkinson, (1985), cited in Alharbi (2015) that “the ability to read and comprehend efficiently is essential for meeting the needs of everyday life as well as for success in the academic arena”. If ability in comprehending reading is low, it means there are also difficulties in acquiring the knowledge while reading the books.

This data is taken by researcher on pre survey at Junior high school especially at the Seventh graders students’. This case is cause of the students’ prior knowledge which the teacher has not taught an effective technique motivation to the students, so the student did not interest to learn an English reading text. They feel difficult in understanding their reading text. It can be looked from their test result of student’s reading comprehension at junior high school SMP HARAPAN PEMATANGSIANTAR. It Indicates 65% of them did not get complete result and 35% of them get complete result. The statement of the complete result is gotten from completeness standard result (KKM) which states that the score 70 is complete and under 70 is not complete.

Based on the explanation above, the researcher investigated a whether improving the reading comprehension Ability trough two models/method namely: START and T-A-I method at the eight class of Junior high school SMP HARAPAN PEMATANGSIANTAR for the next time.

START method includes making predictions and connections to ideas in text based on prior knowledge, constructing mental images that represent ideas in text, asking questions and seeking answers, and constructing summaries of what has been read (Pressley & Afflerbach, 1995). In this research, researchers taught and helped students to make prediction and connections to ideas, construct mental images, ask question and seek the answer, and construct summaries of what will be read.

T-A-I cooperative learning model was developed by Slavin (2008), in his cooperative learning there are theory, research, and practice. Slavin explains that the basic thought of learning is the students will enter the class with knowledge, ability, and motivation diverse. When the teacher delivers the lesson to every group, it is likely there are some students who do not have the ability to learn the terms of the subjects. Other students will know the material, or can learn so quickly that the time will be spent in learning.

According to Sherry Sanden (2014), the students will have motivation by seeing their friends’ ability in learning language in the group. The individual lesson will be brought to the group then the students learn and discuss it in the group, and all group members have parts to be done in the group discussion. The cleverer students will have more responsibility to help the other students to understand the reading material in the group so the discussion about the topic will be better.

The researcher will use START and T-A-I model for improving students’ abilities in comprehending reading materials. In the two English classes that will be going to practice, researcher will find out the effectiveness of START and T-A-I models to be used in English reading class for helping students to have good comprehension in reading activity.

## II. Review of Literature

### 2.1 Reading Comprehension

Reading is one of the activities and as a component of the language skills to get the meaning from the kinds of text. Students actually will have difficulty to have a communication if the students do not like reading. From reading texts, students surely will get many of vocabularies as a tool in the communication (Haris et al., 2006).

Reading is the ability of someone to draw the meaning from the reading material and interpret this information appropriately. Grabe and Stoller (2002) said that comprehension of reading is a dynamic process that requires the reader to use multiple strategies and as constructed meaning, said Henderson and Buskist (2011).

Horowitz (2014) stated that reading comprehension is a complex cognitive process that depends upon a number of ingredients all working together in a synchronous, even automatic way.

According to Sadikin (2008) reading comprehension is a process of giving the ideas and information that the author wants to convey the information available with the reader. In addition, reading comprehension is a tool to solve problems that the readers find in a text in which they need prior knowledge, and personal experiences to develop their comprehension as an effort in communication with information, ideas, and point of view (Moreillon, 2007).

### 2.2. Recount Text

Recount text is used to relate experiences or retell events for the purpose of informing, entertaining, or reflecting. Recount can be personal or imaginative (Engaging and Exploring Recount Writing, 2012).

Djuharie (2010) mentioned in his book that recount text is reconstruction of something which happened in the past. It is spreading sequence of event over time and the purpose of this text is to tell what has happened. In recount the text will be begun by telling the reader who is involved, what happened, where is the event took place and when did it happen? The sequents of the event are then described in some sorts of order, for example, a time order. The generic structures of recount text consist of three parts; they are setting or orientation, events, and also conclusion.

The Characteristics / Language Feature of Recount Text

- Using the simple past tense, past continuous tense, past perfect tense, and past perfect continuous tense.
- Using temporal sequence, e.g. On Saturday. On Monday. On Sunday
- Focus on specific participant, e.g. I (the writer)
- Using the conjunctions, such as: then, before, after, etc.
- Using action verb, e.g., went, stayed

### 2.3. Descriptive Text

According to Anerli (2012) who quoted from Nugroho, et al.,(2010) “Descriptive text is the kind of the text type, which has the social function to describe about the real thing; it can be person, place, animal, build and so on.” Further, Gerot and Wignell (1994) mentioned that descriptive text is a kind of text with a purpose to give information.

Furthermore, descriptive text is the text that contains a form of discourse that seeks to present a thing or object of conversation that makes the object as if the reader saw the object for himself or as if it was in front of the reader’s head (Amrolani et al.,2014). A text with the main idea is conveyed by clearly describing the object, place, or event that is being

the topic to the reader. Therefore, the reader seems to feel what is being expressed in the text directly. A descriptive is a form of writing related to the writers' efforts to provide details of the object being discussed or written (Kosasih, 2019).

#### Language Feature of Descriptive Text

- Specific participant: has a certain object, is not common and unique (only one).
- The use of the adjective (an adjective) to clarify the noun
- The use of simple present tense: The sentence pattern used is simple present because it tells the fact of the object described.
- Action verb: verbs that show an activity.

### a. Narrative Text

Teacher who teaches reading have their own strategy to teach reading and make their students understand. RAND Reading Study Group (RRSG, 2002) stated "Good instruction is the most powerful means of promoting, developing, and preventing reading comprehension problem".

Block and Pressley (2002) stated, "Students should practice the strategy with guidance, using many texts, until they have a good understanding of the strategy and how to apply it." According to the government, narrative text is a right text for junior high school as the learning reading topic.

Dymock.S. (2007), told "In general, narrative text involves reading presented as nonfiction (e.g., biographies and memoirs) or fiction (e.g., novels and fables) stories that tell the reader who did what, to whom, and why did". Here, the readers will know the explanation in the text clearly.

#### Language Feature of Narrative Text

- Past tense (killed, drunk, etc)
- Adverb of time (Once upon a time, one day. Etc)
- Time conjunction (when, then, suddenly, etc)
- Specific character. The character of the story is specific, not general
- Action verbs. A verb that shown an action.
- Direct speech. It is to make the story lively

### 2.4. Cooperative Learning

Cooperative learning is a teaching model by which students learn in small groups to achieve their goal. In their group students will be divided by various ability, gender and different levels of their knowledge and in their group, they can help each other (Polat, 2011).

According to Cafferty (2006) cooperative learning is a model which represents the product of ongoing investigation based on research and practice as to how to minimize the benefit the students' interaction. Further, Jolliffe, Wendy (2007) stated that cooperative learning requires students to work to improve their own learning.

### 2.5. Students and Teachers Actively Reading Text (START) Model

Researcher will use the same material in the START group and in the T-A-I group, by giving new kinds of reading text for students every meeting. The researcher will apply START (Student and Teacher Actively Reading Text) model. The procedures of START model are adopted from Scharlach, (2008): (1). Teacher will prepare some of reading materials and the kinds of reading material are narrative, descriptive, recount and procedure text. (2). Students will be divided to groups and each group consists of 4-5 students. (3). Students freely will choose what kind of reading material they want to read

from what the teacher will prepare. (4). During the read-aloud, teacher will use sticky notes to jot down each prediction, connection, question, main idea, summary, prediction check, and judgment and place the sticky note in the book as they are reading. (5). Before the next read-aloud session the teacher model removing the sticky notes from the previous reading and placing them into the appropriate boxes on the recording sheets. The process will be repeated with each new reading. (6). Before reading, teacher will ask students to write their prediction in a little paper about what they are going to teach. (7). During reading, students will do making connections, and questioning. (8). After reading, students will do summarizing, checking prediction, and making judgment. (9). Each student will answer 5 W + 1 H questions that will be given by teacher. (10). As this is START model, student can ask teacher about the topic and will read together.

According to Sanden (2014), there are “Three major conclusions about the essential components of independent reading in the classroom of the teacher participants:

- teacher participants supported students’ reading independence;
- they focused on students’ reading growth; and they were committed to students-centered practices.”

## 2.6. T-A-I Model

T-A-I (Team Assisted Individualization) model is one type of cooperative learning. T-A-I model can be translated as “Individual Assistance in Group”. T-A-I model is often interpreted as Team Accelerated Instruction (Dimyatib dan Mudjiono, 2004). T-A-I is that the implementation of cooperative learning, students will be divided into small group heterogeneous. One of the important points that must be considered to form a heterogeneous group here is the students’ academic ability. Each group will comprise of 4-5 students. Each member of the group has the responsibility of each (Woolley, 2010).

Suyitno (2007) stated learning T-A-I model has several steps for instance: (1). The teacher gives the task to the students in individually. (2). The teacher provides individually quiz. (3). The teacher forms several groups and each group consist four or five students which each group has the cleverer student of whole students in the classroom. (4). The individual student learning result will be discussed in the group. (5). The teacher will be guide of the students to make summary of the study, (6). Teacher gives the quiz to the students individually.

There are several steps in procedures of T-A-I model: (1). The teacher introduces the lesson plan and the use of T-A-I model to the students, and ask their responses by giving the time for answering and questioning. (2). The first treatment, the teacher will give the placement test about reading comprehension, where the material is taken from students’ text book. (3). By the result of the placement test, the teacher will form the groups that consist of 4-5 students each group. (4). Every meeting the teacher will administered and explain the material to each group, then the students learn by individually, and when some of them is done, they can help each other. (5). After studying group, then each group have to do the comprehension exercises based on the reading material, and the teacher take the score based on the group of the students. (6). When one material finish, the teacher will guide the students to make the summary of the material as a whole associated with problem-solving strategies. (7). And in the end of the study, the teacher will give the quiz to the students in individually.



### III. Research Method

#### 3.1 Research Design

This research used quantitative method with the one pre-test and post-test group design. This experimental design compared two models for the students reading comprehension improvement between START model and T-A-I model. Ary, et al (1985) stated that experimental is researcher's way to gather evidence relevant to the hypothesis. Mc. Millan (1992) stated that the researcher designed three activities; conducting the pre-test, treatment, and post-test in each group.

The experimental research is shown in the table below:

**Table 1.** Pre-test and Post-test Group Design

Group	Pre-test	Treatment	Post-test
VIII A	Y	X <sub>1</sub>	Y
VIII B	Y	X <sub>2</sub>	Y

Y : Student's reading comprehension scores in pre-test and post-test

X<sub>1</sub>: START treatment

X<sub>2</sub>: T-A-I treatment

#### 3.2 Population of Research

According to Sugiyono (2015:80), the populations is a generalization that consist of object or subject who has quality and characteristic that is decided by researchers to be learned and then make a conclusion. The population of this research will take from the eleventh grade students of SMP Sw HARAPAN PEMATANGSIANTAR. The students of VIIIA as the experimental group who have been taught with START model and the students of VIIIB as the experimental group who have been taught with T-A-I model. There were 28 students in the START group and it was assisted by teacher in each group activities. In T-A-I group, there were 28 students and they were assisted by students in each group activities. The total of the two group were 56 students. They were around 13 to 15 years old.

#### 3.3 Sample of Research

In this research terms a sample is a group of people, objects, or items that are taken from a longer population to ensure that we can generalize the findings from the research sample to the population as a whole. The sample is a part or representative of the population (Arikunto, 2006:131). And according to Sugiyono (2015:81) sample is the part of the number and the characteristic that possessed by the population.

We need technique to get sample from the population to determine sample that we used for research, there are some of technique that we used to be. Sugiyono (2015:82) on his book divided by two technique sampling, probability sampling and non-probability sampling. Probability sampling can decide by four techniques, include simple random sampling, proportionate stratified random sampling, disproportionate stratified random sampling, and cluster sampling. And non-probability sampling can divided by six techniques, include systematic sampling, quota sampling, incidental sampling, purposive sampling, surfeited sampling and snowball sampling. According to Arikunto (2006:134) if the population less than 100, it is better to take all the population. And if the population more than 100, it can be taken between 10-15%, 20-25% or more depend on the ability of researcher which seen from the time, energy or the data. And the quantity the research

environment. So, in this research, the researcher uses all student in the research class as the sample of research because the total is 56 students.

### 3.4 Research Instrument

The instrument of this research is the reading comprehension test for pre-test and post-test. Pre-test and post-test were multiple-choice questions with a total of valid questions. The total of multiple-choice is 25 questions. The pre-test have been designed to measure the ability of the students in reading before START and T-A-I model have been applied. The post-test was designed to see the result of the study after applying START and T-A-I model. The book that was used in teaching both classes was English Book for grade VIII as their textbook in the school.

#### a. Pre-test

In the beginning of treatment, reading comprehension test is given for both to the START group and T-A-I group. The students were given minutes to finish the test and the test consisted of 25 valid multiple-choice questions from the pilot test result

#### b. Treatments

The START group and the T-A-I group were given the different treatments. The START group has been treated by using START model, and the T-A-I group has been treated by using T-A-I model.

There were ten meetings have been conducted for both group. The duration for each meeting was 45 minutes; each meeting consisted of pre-activity, main activity, and post-activity.

**Table 2.** START and T-A-I

<b>START</b>	<b>T-A-I</b>
<ol style="list-style-type: none"> <li>1. Before Reading <ol style="list-style-type: none"> <li>a. The teacher introduces the lesson plan and the use of START model.</li> <li>b. Students freely chose the reading material that they are going to read from choice of given texts.</li> <li>c. Teacher divides students in groups.</li> </ol> </li> <li>2. During Reading <ol style="list-style-type: none"> <li>a. One by one, the students in the group read aloud their chosen texts.</li> <li>b. Teacher will use sticky notes to jot down prediction, visualization, connection, question, main idea, summary, prediction check, and judgment.</li> <li>c. Students place the sticky note in the book as they are reading.</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Before Reading <ol style="list-style-type: none"> <li>a. The teacher introduces the lesson plan and the use of T-A-I model.</li> <li>b. The teacher is who decides what reading material that students are going to read.</li> <li>c. Teacher divides students in group.</li> </ol> </li> <li>2. During Reading <ol style="list-style-type: none"> <li>a. The students read and learn individually.</li> <li>b. When some of them have done, they can help the other.</li> </ol> </li> <li>3. After Reading <ol style="list-style-type: none"> <li>a. After studying, each group has to do the comprehension exercises based on the reading material.</li> <li>b. The teacher takes the score based on the group.</li> <li>c. Teacher will guide the students</li> </ol> </li> </ol>

d. Students can ask teacher about the topic. 3. After Reading a. Each students will answer 5W + 1H questions that will be given by teacher.	to make summary. d. The end of the study, the teacher will give the quiz to the students in individually.
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### c. Post-Test

After the treatments, the post-test was conducted to find out whether the use of START and T-A-I model could impact the students' reading comprehension ability. The post-test instrument was in multiple-choice questions and it consisted of 25 questions about explicit information from recount text and descriptive text. Both group of the START and T-A-I have taken the test.

## IV. Result and Discussion

The researcher used clustering sampling technique to get the sample and the researcher get 56 students. The researcher will take 25% from the amount population. The researcher chooses two classes randomly as the sample of this research is VIII A as control class and VIIIB as experimental class.

It can be concluded that the pre-test result of control class was still bad. From 28 students, there was students that belong to the range 81-100 namely 0 or 0 students. The students belonged to the range 71-80 is 18,67 % or 8 students . Then, 19 students or 70,56 to the range to the range 51-60 and there were 1 students or 2,78 % belonged to the range 41-50. the last , the range 20-40 was got 0 % or zero students . Based on description above it could be concluded that the highest percentages score was obtained by the range 51-60 namely 70,56 . Then, Zero was available in the range 20-40 is 0 % or not any students.

The researcher can found The score of Pretest and Posttest can be seen in appendix. It can be conclude that the score Pretest of control class is 1308 and for average of control class is 52, 32.

After doing pretest, the students of control class were taught by using conventional method in reading narative for two meetings and using START models.

To get the mean (average) score, the researcher use the formula as the following:

$$\bar{X} = (\sum X) / N$$

$$\bar{X} = 1488 / 28$$

$$\bar{X} = 52,32$$

So, the mean (average) of pre-test is 52,32.

To get the standard deviation pre-test is calculated as following:

$$SD = 1/N \sqrt{(N \sum X^2 - (\sum X)^2)}$$

$$SD = 1/28 \sqrt{(25.76928 - (1488)^2)}$$

$$SD = 1/28 \sqrt{(1923200 - 1710864)}$$

$$SD = 1/28 \sqrt{212,33}$$

$$SD = 1/28.849,32$$

$$SD = 33,97$$

Based on the result of calculation above, it is found standard deviation from pre-test data is 33,97.



#### 4.1 Discussion

By having the data analysis, the researcher discussion that using START and T-A-I model significantly affects students reading comprehension ability in narrative test. The researcher using START and T-A-I to improve students reading comprehension. The first step of this research is pre-test to know whether the reading skills of the students are bad. The researcher gives a text and students read the text one paragraph for each student. After that the researcher gives a test in the form of multiple choice and true/false to all students to answer the questions related to the text and then researcher checking and scoring the students multiple choices and true/false. The researcher get result in control class was 1488 and mean (average) is 52,32 and post test was 1668 and mean (average) is 59,36. In experimental class get result 1580 and mean (average) pre test was 57,92 and post test experimental class was 82,4. The standard deviation control class in pre test was 33,97 and post test was 24,29 while experimental class in pre test.

Based on a level significance of  $t$  table 0,05. The  $t$ -table value is on the amount sample ( $n$ ) 56 subtracted 2 then the number of sample will be 54 which the value of  $t$ -table was 1,99. Then, result was (degree of freedom) = 54

It can be concluded that result of experimental class more of control class result that the researcher was accepted. It can be seen that both of the groups of students improved their reading comprehension ability. It can be seen that both of the groups of students improved their reading comprehension ability. The group of students who acquired the START learning model showed moderated improvement it is because the Normalized Gain value = 0.327035. The value was between 0.31- 0.70 of a moderate level of Normalized Gain. The group of students who acquired the T-A-I learning model showed low improvement and it was because the Normalized Gain value = 0.234225. The value was between 0.00 - 0.30 of the low level of Normalized.

#### V. Conclusion

Based on the research findings and discussion, the researcher concluded that Before treatment T-A-I, The ability of grade eight in reading narrative text ability was low since the pre-test score were control class was 1488 and mean (average) is 52,32 and experimental class was 1580 and mean (average) was 57,2. After treatment T-A-I, their ability had been improved since the post-test, score were control class was Post test control class was 1668 and the mean (average) 62,32 post test experimental class 1580 and the mean (average) 63,3. The usage the T-A-I still give effect to students' reading comprehension in narrative text on grade Seventh of SMP SW HARAPAN PEMATANGSIANTAR. Based on this research the researcher wanted to give suggestions which the teacher can apply or use this method to used in the classroom and improve the strategy more.

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