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## The development of reading comprehension for 7th-grade students

### by using Directed Reading Thinking Activity (DR-TA)

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#### ABSTRACT

The purposes of this research were: 1) to examine the efficiency of the instructional packages using Directed Reading Thinking Activity (DR-TA) for 7<sup>th</sup> grade-students, and 2) to compare students' achievement after using Directed Reading Thinking Activity (DR-TA) through pre-test and post-test. The sample was selected from a purposive sampling of 40 7<sup>th</sup> grade-students from Phothawattanasenee School in the academic year 2018. The instruments of this study were 1) five 100-minute lesson plans using Directed Reading Thinking Activity (DR-TA), 2) the five sets of instructional packages of reading comprehension; each set consists of an English passage, an exercise, and a reading comprehension test, and 3) a reading comprehension pretest and posttest. The statistics used to analyze the data were arithmetic mean ( $\bar{x}$ ), percentage, standard deviation (S.D.), percentage, and dependent t-test. The results of the study were as follows;

1. The efficacy value of using the instructional packages based on Directed Reading- Thinking Activity (DR-TA) method for 7<sup>th</sup>-grade students was defined as 83/84 efficiency that was higher the expected standard of 80/80.

2. The result of students' achievement by using Directed Reading Thinking Activity (DR-TA) for 7<sup>th</sup>-grade students through the post-test scores was higher than pre-test scores at .01 level of significant.

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The conclusion of this study reveals that using Directed Reading Thinking Activity (DR-TA), through the instructional packages, were quite useful for students' reading comprehension skill. Students also learn and practice how to develop their reading skill by using the instructional packages with DR-TA. Furthermore, the teaching of reading with DR-TA can improve students' reading comprehension skill. Students were motivated to read more English texts.

**Keywords:** Directed Reading- Thinking Activity (DR-TA), Reading comprehension

### Introduction

English is important for communication around the world as interlanguage. And thus, Thai government has attached great importance to increase Thais' English accomplishment. Recently, the government proposed a policy to improve English skills for Thai students. According to Diskon, the Minister of Education starts English for Thais project in 2018 to promote English learning and teaching. Students are encouraged to practice four language skills; speaking, listening, reading, and writing. Especially, reading skill that is the key of varieties of knowledge (Diskon, 2018). Through reading, students not only learn about the various culture and understand different opinions from people in different places but also get a positive attitude to advance learning English system.

Currently, many Thai students are not interested in an English class because they always think learning English is very difficult to understand. Moreover, a lot of classes in Thailand, students both lack motivation and are non-participate in their classroom when they take an English passage. They do not attempt to read a long passage at all and try to skip to the end of the reading. They are also bored of reading comprehension exercises with some students simply copy a sentence from the passage and writes it down into a worksheet without getting the main idea. They do not know some words and do not know how to predict the meaning of a vocabulary in the context. All of these reasons seriously affect students' reading comprehension. According to The Ordinary National test (O-NET), the efficacy value of English test that was taken by 9th-grade students displayed that the national average scores were 30 from 100 in 2016 and also 2017 (The Ordinary National test, 2017). It showed that Thai students do need to develop their English skills.

My class was similarly affected by the mentioned reading comprehension problems. For example, at the beginning of the class, many students waited for the teacher to restate the story from English into Thai language while some of them who read only the end of the story was trying to explain the passage by imagination the detail. It means they did not catch the real main idea of the story. According to Novita, he stated that the factor influencing reading instruction is related to



students' reading skill. The student remained having difficulty comprehending an English text. They almost could not find the main idea and some of the supporting details of the text (Novita, 2014). These are the reasons why improving reading skill is an urgent issue for the students.

One of the interesting method in teaching reading is Directed Reading – Thinking Activity. Paxton suggested that “DR-TA is a strategy that encourages students to use their minds while reading a text. It guides students to ask questions based on what they read, make predictions on the story line and read further to confirm if their predictions were right. This process helps develop them into thoughtful learners, making their active to comprehend more from the text” (Paxton, 2018) this point suggests that DR-TA method is useful in classes. Students develop their reading skill through the process of this method. According to Anderson, he commended that using the DRTA technique, students are guided through the process of sampling text, making predictions based upon prior knowledge and textual information, resampling text, and confirming or adjusting predictions in light of new information. This approach is frequently identified as an exemplary instructional activity for developing comprehension and critical thinking skills (Anderson, 1984; Tierney and Pearson, 1986).

However, this previous study leaves a number of key question unanswered. The researcher decided to develop students' reading comprehension by Using Directed Reading – Thinking Activity in order to solve the students' problem. Although a teacher lets students read the text by themselves, a teacher still assists students who need to help with words. Students also learn how to get better reading comprehension step by step. As well as, this solution can also stimulate the students to guess the story before reading. Especially, students are not only developed their reading comprehension but also improved their long-term memories through the activity in their class.

The objectives of the research are 1) to inspect the efficacy of the instructional packages by using Directed Reading Thinking Activity (DR-TA) for 7th-grade students, and 2) to compare students' achievement before and after using Directed Reading Thinking Activity (DR-TA) through pre-test and post-test.

### **Research Hypotheses**

1) The efficacy of using the instructional packages by Directed Reading-Thinking Activity (DR-TA) method for 7th-grade students defines as the expected standard of 80/80.

2) The students' achievement after using Directed Reading Thinking Activity (DR-TA) for 7th-grade students from post-test scores are higher than pre-test scores at .01 level of significant



## Population and Sample

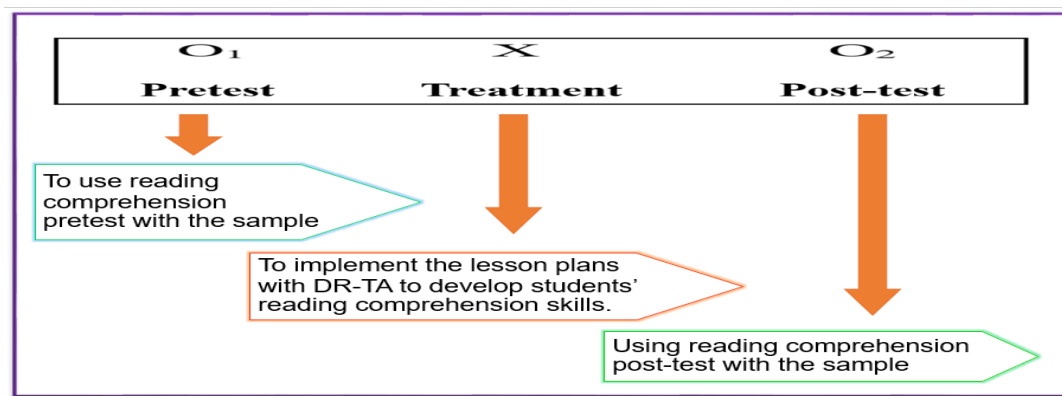
The participants in this study were 7<sup>th</sup> grade-students from Phothawattanasenee School, Ratchaburi, Thailand and the sample was selected from a purposive sampling of 40 7<sup>th</sup> grade-students in the first semester of the academic year 2018

## Methodology

For the purpose of the study, the researcher developed a reading comprehension instructional packages for 7<sup>th</sup>-grade students. It included 1) five 100-minute- lesson plan using Directed Reading Thinking Activity (DR-TA); 2) the instructional packages of reading comprehension which consist of five articles, an exercise and reading comprehension test of each article, and 3) reading comprehension pretest and posttest for 7<sup>th</sup>-grade students which consists of four parts; short story, true or false, reading passages and ordering the evens with a total of 40 points. Data analysis and statistics included dependent t-test, and the developmental testing (E1/E2).

The Procedures of the one-group pretest and post-test study design follow 6 steps. The first step was to prepare the material of this study (it included 1. five lesson plans by using Directed Reading Thinking Activity (IOC=0.89) 2. the instructional packages of reading comprehension (IOC=0.91), and 3. reading comprehension pretest and posttest that was examined with Index of Item - Objective Congruence by the expert (IOC=0.88). Both difficulty (p) and discrimination (r) of reading comprehension test were 0.22 – 0.66, and 0.24 – 0.80 respectively. The second was to use reading comprehension pretest with the sample; 40 people of 7<sup>th</sup>-grade students in the class fifth from Phothawattanasenee School in the academic year 2018. Next step was to implement the lesson plans with DR-TA to develop students' reading comprehension skills. The study was administered within two weeks and a day (three periods totalizes 150 minutes per a week). It was started on August 1<sup>st</sup> to August 16<sup>th</sup>. There are two periods for test and five periods for management the class with DR-TA method. This method included 1) to predict from the title or the pictures, 2) to read and to check their predictions, 3) to ask the questions, and 4) Doing an exercise and activities (Adapted from: Tierney et al., 1995: 214-216, Cited R. Chaemsai1, 2016a). The fourth was to collect raw scores of the instructional packages using a unit test at the end of each lesson and follow up students' efficiency. The fifth was to use reading comprehension posttest with the sample. Finally, to analyze the data of

this study using Mean, percentage, standard deviation, t-test, and developmental testing (E1/E2). Look at the design of the study and variable of one-group pretest and post-test design below.



**Figure 1:** The design of the study and variable of one-group pretest and post-test design (Adapted from Paul J. Lavraka, 2008)

## 2.1 Formula and Equation

In this sample, the following equations are presented as illustration.

One-group pretest-posttest design: With this research design the test unit is measured twice, one before the test and the other after the test. There is still no control group; which not receiving the treatment. Here is the standard notation for a one-group pre-test - post-test study: (Paul J. Lavraka, 2008)

O <sub>1</sub>	X	O <sub>2</sub>
Pretest	treatment	posttest

The efficacy value of the instructional packages. The equation used to calculate is based on (Chaiyong Promwong, 1982)

$$E_1 = \frac{\sum X}{N} \times \frac{100}{A}$$

E<sub>1</sub>: Efficiency of the teaching process

$\sum X$  : Sum of students' instructional package test scores

N: Total number of students

A: Total test score of instructional packages



$$E_2 = \frac{\sum F}{N} \times \frac{100}{B}$$

$E_2$ : Efficiency of product

$\sum F$ : Sum of students' post-test scores

N: Total number of students

B: Total score of the posttest

t difference between two means, for Dependent Samples: the equation used to calculate is based on (Stephanie McCammon, 2014)

$$t = \frac{\sum D}{\sqrt{\frac{N \sum D^2 - (\sum D)^2}{N-1}}}$$

$\sum D$  : Sum of the differences between students' pre-test and post-test score.

$\sum D^2$  : Sum of the squared differences (The differences between each student's pre-test and post-test score.)

$(\sum D)^2$  : Sum of the differences between all of students' pre-test and post-test score, squared.

## Results

### The result of the instructional packages

**Table 1:** the efficiency results of the instructional packages by using Directed Reading Thinking Activity (DR-TA) for 7<sup>th</sup>-grade students to develop reading comprehension compared to the expected standard of 80/80 (E1/E2)

Sample	During study Score		Post-test Score		E1/E2
	Score	Total	Score	Total	
40	4000	3330	1600	1348	83/84

The data presented in table 1 shows that the result of the instructional packages by using Directed Reading Thinking Activity (DR-TA) for 7<sup>th</sup>-grade students was total 84.25 percent. It reveals



that the efficacy value of the instructional packages defined as 83 / 84 efficiency that was higher than the expected standard of 80/80

### **The result of students' achievement by using Directed Reading Thinking Activity (DR-TA) through pre-test and post-test**

**Table 2:** the result of comparing the difference between pre-test and post-test for 7<sup>th</sup>-grade students

Sample	N	$\bar{x}$	S.D.	T	Sig.
Pre-test	40	22.35	5.12	16.608	0.000*
Post-test	40	32.3	2.93		

\* p – value  $\leq$  0.01

The data presented the mean and standard deviation of the difference between pre-test and post-test for 7<sup>th</sup>-grade students. The mean of the pre-test score was 22.35 and post-test score was 32.3 while the standard deviation of pre-test was 5.12 and post-test was 2.93.

The result of students' achievement by using Directed Reading Thinking Activity (DR-TA) through pre-test and post-test for 7<sup>th</sup>-grade students showed that the sample's post-test was higher than their pretest scores at the .01 level of significant. It means the sample were developed in English reading comprehension after they were taught reading comprehension by using Directed Reading Thinking Activity (DR-TA)

### **Conclusions**

The conclusion of this study reveals that using Directed Reading Thinking Activity (DR-TA), through the instructional packages, were quite useful for students' reading comprehension skill. Students also learn and practice how to develop their reading skill by using the instructional packages with DR-TA. Furthermore, the teaching of reading with DR-TA can improve students' reading comprehension skill. Students were motivated to read more English texts.

The result shows that the efficacy value of the instructional packages was higher than the expected standard. Moreover, students' achievement by using DR-TA displayed that the sample obtained higher post-test scores (at the .01 level of significant) after they were taught reading comprehension with this method.



### Recommendations

The teachers who need to use Directed reading thinking activity (DR-TA) method in their class should learn about the basic education core curriculum, school curriculum, theories about DR-TA teaching technique, and how to manage a class, respectively before practice students' reading comprehension by the instructional packages with DR-TA method. Moreover, there is important to realize students' multiple intelligent and language acquisition because it will be able to increase students understanding what they read completely.

### Suggestions for Further Research

A teacher should advance these instructional packages by observing students' language acquisition and collecting their raw data before using it into each class. Then, the teacher manages their class with suitable lesson plans for the growth of student achievement.

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