### CHAPTER III

#### **METHODOLOGY**

This chapter includes information about participants, research instruments, and data collection.

# **Participants**

The participants were 40 Mattayomsuksa three students (Grade 9) at a government school in the north of Thailand. They were 12-13 years old. There were 76 students in Mattayomsuksa three (M.3). The participants came from the students who agreed to be volunteers to study on Saturday and Sunday afternoons. It might interfere with the regular teaching program if the research was conducted on Monday-Friday so that the research was conducted on the weekend.

There were 12 boys and 28 girls. The students were divided into two groups by using random sampling method (counting numbers 1 and 2). Group J (Jigsaw group) had 20 students, 7 males and 13 females and group D (Dictogloss group) also had 20 student, 5 males and 15 females. The grammar features that were taught in class were simple present and simple past tense. The participants had to study both form and function of using these two tenses.

Simple present and simple past tenses are tenses that are in M.3's curriculum.

From the discussion with the teachers who taught in M.3, the students had many problems in using these two tenses. For example they did not put —ed onto verbs when they talked or wrote sentences that happened in past. In Thai when students talk about things that happened in past, they do not change the form of verb so this might be the cause of their confusion in English. Due to the students' problems of using tenses, simple past and simple present tenses were used in this study.

The school begins to teach English to students at Prathom 1

(Grade 1) so most of the participants have had six to nine years of studying English. The students study English for three hours per week. Students study English with Thai teacher and the teacher speaks Thai in class. The students practice listening and speaking English from videos and cassettes that the teachers provide in class. Furthermore, students do not have chance to practice writing paragraphs. Most of the times the students have to write because the exercises in their workbooks require them to write, but it is only short answer sentences.

Before discussing the details of research instruments, Figure 1 is given as an overview of the research design.

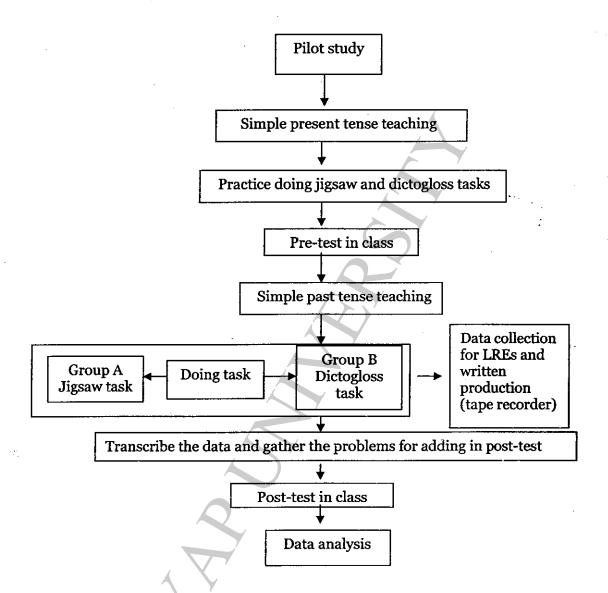


Figure 1. Overview of research design

Figure 1 provides an overview of research procedures. The procedure began with conducting a pilot study to identify the linguistic problems to create the core pre-test and post-test items for the target group. After that the target group learnt simple present tense and practiced doing jigsaw and dictogloss tasks. The students then had to do the pre-test before they learnt simple past tense. The students were divided into two groups and did jigsaw and dictogloss tasks for the data collection of LREs and written production. Tape recordings were transcribed to gather data in order to create the tailor-made post-test items. One week later the students did the post-test in class. After that the data – the transcripts narratives and test scores - were analyzed. This will be discussed in more detail later.

#### Research Instruments

There were four kinds of instruments used in this study, namely tests (divided into two kinds; core pre- and core post- tests, and tailor-made post-tests), task observation and written production.

#### Core Pre-Test and Core Post-Test

The way of preparing the core pre-test and post-test followed the process that Swain and Lapkin (2001) used in their study.

Before collecting the data for the present study, a pilot study was conducted with four Mattayomsuksa three with the set of pictures shown in Appendix B. The teaching materials used in the pilot study were the same as those used for later data collection. Two students performed the jigsaw task and the others did the dictogloss task. The problems that occurred in students' discussion and students' paragraph writings were selected to construct the core pre-test and post-test (Appendix C).

The test has 10 items with a maximum score of 20 points. It provided a certainty scale where the students made judgments about the grammaticality of each sentence. The focus of the core pre-test was on the simple past tense. It evaluates the student's understanding of simple past tense form and function (Appendix C items 1, 2, 3, 5, 8, and 9), and word order (items 4, 6, 7, and 10.) with respect to a picture. The students had to indicate whether each sentence was certainly correct, probably correct, certainly incorrect, or probably incorrect. The students also had a choice to select the "do not know" option. The options were provided for the students in Thai.

### Scoring

The scores set at 0.5, 1, -1, -0.5, and 0 points. The way to score each item test is shown in the following examples.

Sentences	Certainly	Probably	Certainly	Probably	Do not
	correct	correct (น่าจะถูก)	incorrect	incorrect (ਪਾਂਬਵਜ਼ਿਸ਼)	know (ไม่อั
	(ถูกแห่นอน)	( in 140 Qui)	(11111111111111111111111111111111111111	(4),4,4,4,4	
The dog is bit Peter yesterday.			7	-	
The dog bit peter yesterday.		,		<u>L</u>	

Figure 2. Example of the way to score core pre-test and core post-test items

Since the first sentence was incorrect, the scores would be awarded as followed: -1 point for "certainly correct", -0.5 point for "probably correct", 1 point for "certainly incorrect", 0.5 for "probably incorrect", and 0 point for "do not know". In the sample shown in table above, this student received 1 point. With the second sentence (which is correct), the scores would be awarded as followed: 1 point for "certainly correct", 0.5 point for "probably correct", -1 point for "certainly incorrect", -0.5 for "probably incorrect", and 0 point for "do not know". The student in the sample above indicated that the sentence was probably correct; therefore, the student got 0.5 point.

The core post-test contained all pre-test items in addition to

the new tailor-made post test items. The way of preparing the tailor-made post-test items followed Swain and Lapkin (1998) and is explained below.

# Tailor-Made Post-Test Scores

As described above, the core-post test contained all core pre-test items and included some items arising from the collaborative dialogues – the discussions between each member of a pair. These test items were in the form of multiple choice questions (see Appendix D). Only the most obvious discussion about grammar and past tense forms and clear example incorporated into items for this additional tailor- made post-test. The test was given in class one week after participants engaged in pair discussion in the tasks. Each pair had to do the same questions individually. The tailor- made post-test contained three item types. Type (A) items were constructed from dialogue where the pairs came to correct decisions about language. Type (B) items based on the dialogue where the pairs did not agree about language and Type (C) items constructed from the dialogue where pairs come to an incorrect decision.

### Type (A) Items

Two examples of LREs that appeared in the transcribed dialogue of Pair 11 in Group D and Pair 6 in Group J were the examples of the test in type (A) items.

# (Pair 11)

S1: จูบ จูบ คำไหนนะ [Kiss, kiss, which one?]

S2: จูบเหรอ ก็/kiss/ ยังไงล่ะ สะกดว่า k-i-s-s [Kiss? It's kiss, spelled k-i-s-s.]

S1: ใช่แล้ว/kiss/k-i-s-s [Yeah, kiss, k-i-s-s]

S2: ต้องเติม -ed ใช่ไหม
[Have to add -ed. Right?]

S1: ใช่ เขียนว่า "He kissed a fish." เขาจูบปลา [Yes then write "He kissed a fish" He kissed a fish.]

The students came to the correct decision as they helped each other to find the word, "kiss" and they changed it into the correct form of past tense. This discussion led to a test question,

- (A) He ... a fish on his mouth.
  - 1. kissed
- 2. kiss
- 3. kick

(Pair 6)

S1: ปลากัดจมูกของผู้ชายคนนั้น
[The fish bit that man's nose]

S2: ปลากัด cut off.

[A fish bites, cut off]

S1: แล้วช่องที่ 2 ของ cut คืออะไร [What is the past form of "cut"?]

S2: cut แปลว่าตัดไม่ใช่เหรอ

[Cut means /tàt/, doesn't it?]

S1: (หยุดคิด) กัด อะไรสักอย่างนี้แหละ [(pause) . "Bite" something like that.]

S2: ช่องที่ 2 น่าจะตัด -e ออกนะ [Should delete -e for its past form.]

S1: ໃຫ້ແລ້ວ [Right.]

The students agreed to use the word "bite" instead of "cut off" to change to its into the correct form in past form by deleting "e".

Therefore the test item was

- (A) A fish .....his nose last week.
  - 1. bit
- 2. bited
- 3. bite

## Type (B) Items

These items constructed from the dialogue which the pairs did not agree about the language. Two examples of LREs used to create (B) items appeared in the transcribed dialogue of Pair 12 of Group D and Pair 3 of Group J.

(Pair 12)

S1: เพื่อนเขาตัดจมูก ตัดหัว

[His friend cut the nose, cut the head]

S2: Head [Head]

S1: Head เหรอ ไม่น่าจะใช่นะ น่าจะ hair

[Head? I don't think so; should be "hair"]

S2: Cut แปลว่าจะไร

[What does "cut" mean?]

S1: แปลว่าตัด

[(It) means /tat/.]

S2: ทำไมเธอเขียนว่าตัดจมูกล่ะ

[Why do you write "cut the nose"?]

S1: เออ! ไม่ใช่ Head นี่ใง h-a นี้มันแปลว่า หมวก h-a hat เขียน ว่า h-a-i-d ใหม
[Oh! No. It's head, see? H-a means hat. Should spell it as h-a-i-d?]

S2: (silence)

S2 did not agree with S1's decision. In the record, S2 spoke to himself about the spelling of head, but S2 decided to keep quiet. S1 wrote the word "haid" as he thought it should be spelt. From this discussion, the following question was formed.

- (B) A man.....the fish's.....off.
  - 1. cut/head
- 2. cutted/head
- 3. cut/haid

(Pair 3)

S1: ชายคนนั้นถูกปลากัด

[That man was bitten by a fish]

S2: กัดนี้อะไร kiss ใช่ไหม ถูกไหม

[What's the word for "to bite"? Kiss? Right?]

S1: ใช่เหรอ kiss กัด kiss เติม -ed ใช่ไหม

[Are you sure? Kiss. Bite Kiss. Add "ed" Right?]

S2: ไม่เติมนะ จำได้.

[Don't think so. I remember (that it does not add -ed)]

S1: ชายคนนั้นจับปลาขึ้นมาโชว์ อะไรต่อ

[That man holds the fish to show off. What's next?]

S2: แล้วปลากัดจมูก

[Then the fish bit (his) nose]

S1: ชายคนนั้นจับปลาขึ้นมาจูบใช่ไหม

[That man hold the fish and kissed it, didn't he?]

S2: จูบคำไหน

[Kiss? Which word?]

S1: ไม่รู้ จำไม่ได้

[(I) do not know. (I) can't remember.]

The students did not come to a solution about how to spell the word "kiss" so the question as shown in the following would ask students about this word.

- (B) A man....on the mouth.
  - 1. kissed the fish
- 2. kit fishing 3. kick the fish

# Type (C) Items

The last one is the test (C) item which students came to an incorrect decision, as shown in the following examples from Pair 16 (Group D) and Pair 7 (Group J.)

(Pair 7)

S1: แล้วตกปลาได้ตัวใหญ่ เขียนเลย
[Then caught a large fish. Write it down.]

S2: ผู้ชายใช่ไหม He [A man? He...]

S1: ตกปลาได้ตัวใหญ่ fishing ตัวใหญ่ l-a-r-g-e [(He) caught a large fish, fishing, large, l-a-r-g-e]

S2: มีอะไรอีก [What else?]

S1: /ฟิซ บิ๊ก/ [Fish, big]

S2: คำนี้ก็แปลว่าใหญ่ ใช่ไหม fish large ปลาตัวใหญ่ [It also means "large," right? Fish large. A large fish.]

S1: คำนี้แปลว่าใหญ่ คำนี้แปลว่าตกปลา ใช่ไหม เขียนว่า เขาตกปลาแล้วได้ปลาตัวใหญ่
[This word means large. This word means to fish, doesn't it.
So we should write "He fished and got a large fish"]

S2: A fish l-a
[A fish. l-a]

S1: r-g-e

According to the writing production of this pair they agreed to write the sentence, "He fishing a fish large." which was an incorrect decision. The question was as the following.

- (C) An old man caught.....
  - 1. a fish large
- 2. a large fish
- 3. large a fish

(Pair 16)

S1: ปลากัด ปลากัด [A fish bit.]

S2: bit a fish [bit a fish]

S1: A fish bit b-i-t-e-d ปลากัดจะไร [A fish bit, b-i-t-e-d. What did the fish bite?]

S2: Nose จมูก [Nose]

S1: n-o-t-e ใช่ไหม [n-o-t-e, isn't it?]

S2: ใช่แล้ว [Yes.]

There were two errors that occurred in a collaborative dialogue between this pair. First, the two students came to an incorrect agreement as they decided to add -ed to the past form of the word "bite". Another mistake occurred in the word "nose."

They could pronounce the word correctly, but they could not spell the word correctly. The test question was formed as the following.

- (C) The fish.....his.....
  - 1. bited/note
- 2. bit/note
- 3. bit/nose

### Task Observation

The observation arranged in class in week 3. Each pair had to do the tasks in class. While the students were working in pairs and helping each other to complete the tasks, tape and VDO recordings were used to record the interaction. The student's discussions were transcribed; the transcripts were used for two purposes. First, the transcript was used to count the students' LREs. Second, some parts of the dialogues were used to prepare questions for the tailor-made post-test items as described.

Counting of LREs can be illustrated in the following extract (See Figure 3). Bold sentences are examples of form-based LREs and italic sentences are examples of lexis-based LREs.

	·		
S1: and old man ผู้ชายคนนั้นไป ต้องเปลี่ยนเป็น went ใช้ใหม			
อะไรค่อ ไปตกปลา			
[and old man, that man "go" has to be			
changed to "went", right?]	form-based LRE		
S2: ใช่ went fishing ที่ทะเลสาบ P.P.	Torm 2 and a zero		
[Yes, "went fishing" at P.P.lake]			
S1: ที่ทะเลสาบ P.P. ทะเลสาบนี้ l-a-k-e ใช่ไหม			
[at P.P.lake, lake, l-a-k-e, right?]			
S2: ใช้ l-a-k-e แล้วเขาก็ได้ปลาตัวใหญ่ big fish	form-based LRE		
[Yes,l-a-k-e, then he caught big fish]			
S1: แล้วเขาต้องการจะอวดอวดนี้อะไรนะที่เรียนมา			
[then he wanted to, What's the word for			
"show off" that we have learnt in class?]			
S2:อาค นึกออกแล้ว he wanted show off	lexis-based LRE		
[ show, I get it "he wanted show off"]			
S1: เขาก็จูบปากปลา เขานี้ he ใช้ไทม เขาผู้ชาย จูบนี้อะไรนะ			
[He kissed fish's mouth. "He" for a man, right?,			
what's the word for "kiss"?]	lexis-based LRE		
S2: จูบก็ kiss ใง ด้องเติม-ed ใหม	<b>Y</b>		
[Well! It's "kiss", add -ed right?]	y .		
S1: 1# kissed	form-based LRE		
[Yes, "kissed"]			

Figure 3. Example of counting of LREs of pair 12

# Written Production

In pairs the students discussed about the tasks and then they had to help each other to write one written passage. For the pairs who did Jigsaw tasks, after they finished describing the pictures that they held, they had to help each other to compose one story based on the pictures by using past tense. The pairs who did the Dictogloss tasks also composed a story based on an original text. After they listened to cassette, they had to share and discuss their notes. Then they helped each other to reconstruct the story. The

students' written productions were scored by using rubrics as the criteria.

# Rubric Scoring

The written productions of each pair of the students were scored by two experienced M.3 teachers. After teachers read each written production, they gave the points by using rubric as a criterion to score students' production (see Appendix E). Written rubrics were adapted from those used by Swain and Lapkin (2001) in their study. There were five-points rating scales, used to evaluate content, organization, vocabulary, morphology and syntax. Inter- rater reliability was used to evaluate the scoring's reliability. In cases where there was a difference of two points or more, including they discussed to writing before coming to agreement on the score. The inter-rater reliability was calculated at 90%.

# Teaching Materials

Before planning six lesson plans, the teaching materials simple past tense texts and exercises were selected from books used to teach M.3 students (see Appendix H, I, J, and K). Teaching materials were approved by M.3 teachers, so the teaching contents were suitable for the participants. The teaching materials were used in the pilot study group before they were used to teach the

target group. Three weeks before did the research with the participants, pilot study was conducted with four M.3 students who also studied at a government school in the north of Thailand. According to an interview with the students in the pilot study, the result showed the teaching texts and exercises were suitable for them to study and to practice. This suggests that the texts and exercises are also suitable for the participants.

#### Data Collection Procedure

The research was conducted on Saturday and Sundays (6 hours/ weekend) for four weeks. The data collection procedures are discussed below;

#### Week 1

In week 1, the students learned simple present tense structure rules, and practiced doing exercises on the simple present tense. The students learnt the vocabulary that they could apply to use in their written production (see Appendix G) and prepared for the task the following week. The students were told about Jigsaw and Dictogloss' tasks and how to do each task briefly. They had to do the homework to review what they had learned on that day.

#### Week 2

The students had the opportunity to practice Dictogloss and Jigsaw tasks so that they were familiar with the tasks. On Saturday, all students practiced both Dictogloss and Jigsaw tasks. Random

sampling method was used to pair up the students. The students counted round from one to twenty to create 20 pairs. At first the students had to practice doing Jigsaw task and after that they practiced doing Dictogloss task. The students sat in their pairs and listened to the explanation of how to do the Jigsaw task again.

After that the jigsaw pictures were given to each pair. They had 45 minutes to complete the task. After they finished the Jigsaw task, the students practiced Dictogloss in their pairs again. Before the students performed the task, the explanation of how to do the Dictogloss also given. After they finished the Dictogloss task, the original texts were given to each student. The students compared and discussed the original text and their written production with their peers. After that the teacher discussed with the students about the text's meaning and simple present sentences which were in the original text.

On Sunday the students did a pre-test about simple past tense (see Appendix C). After that they studied form and function of simple past tense, the rule of adding -ed to verb, and irregular verbs. The students did some exercises on the simple past tense. The vocabulary that the students could apply to write in their written production was taught to prepare for doing the task. The students were divided into two groups by using random sampling method. They counted round from one to two. Twenty students who counted "one" were in Jigsaw group and the others were in

Dictogloss group. After that the students in each group were paired by counting round from one to ten again to give 10 pairs. Each pair signed up for the time that they were free for doing the task the following week.

#### Week 3

This weekend was arranged for the students to do the tasks in pairs. Their performances were recorded by both video and audio tapes. After completing the task, each pair had a chance to discuss and compare the original text with their written production along with their peers and teacher. During week 4 (Monday-Friday), the tapes were transcribed. Things that each pair discussed in the dialogue were added into the questions in tailor-made post-test items. As discussed before the tailor- made post-test contained three item types. Type (A) items were constructed from dialogue where the pairs came to correct decisions about language. Type (B) items based on the dialogue where the pairs did not agree about language and Type (C) items constructed from the dialogue where pairs come to an incorrect decision.

#### Week 4

On Saturday, the students did the post-test. They had one hour to do the test. After finishing the data collection, the transcripts, the core pre-test and post-test scores, the tailor-made post-test score, and the students' written production were analyzed. Mean and standard deviation were use to compare LREs, core pre-

and post- test scores, and written production. Chi-square was used to analyze the tailor-made post- test scores. This analysis will be presented in chapter 4.

