CHAPTER IV
RESULTS

This chapter provides the results of the study, which include the comparison of language-related episodes between Groups J and D, the comparison of core pre- and post-test scores, the effect of collaborative dialogue on participants' language learning as seen from the tailor-made post-test items, and the comparison of the quality of written narratives between Groups J and D. The research results and the data analysis of the study are as follows.

Comparison of Language-Related Episodes between Groups J and D

Language-related episodes are parts of a dialogue where students talk about language they are producing, question their language use, or correct their language production. According to Swain & Lapkin (2001) there are two kinds of LREs, lexis-based and form-based LREs. Lexis-based LREs are the parts of dialogue that involve students searching for vocabulary and / or choosing among competing vocabulary items. Form-based LREs are the parts of dialogue that involve students focusing on spelling or on an aspect of morphology, syntax or discourse.

Table 1 presents language- related episodes in each of the Jigsaw and Dictogloss pairs.

Table 1

Language-Related Episodes in Jigsaw and Dictogloss Pairs

	Jigsaw Pairs			Dictogloss Pairs	
Pair	Lexis-based LREs	Form-based LREs	Pairs	Lexis-based LREs	Form-based LREs
3	11	6	1	12	16
5	8	11	2	2	5
6	10	19	4	12	15
7	5	13	11	5	7
8	2	2	12	8	11
9	3	4	13	8	11
10	5	6	15	13	9
14	6	9	16	5	13
17	13	17	8	10	25
20	5	8	19	4	1

Table 2 presents the comparison of LREs, both lexis-based and form-based LREs, between participants in Group J and Group D.

Table 2

Comparison of Language Related Episodes (LREs) between Group J and Group D (N= number of pairs; Mean = number of LREs /total of pairs.)

	Group J			Group D			Sig.
Language-related episodes	N (Pairs)	Mean (LREs)	S.D.	N (Pairs)	Mean (LREs)	S.D.	
Count of lexis- based LREs	10	6.80	3.58	10	7.90	3.18	.51 (ns)
Count of form- based LREs	10	9.50	5.52	10	12.20	5.61	.29 (ns)
Count of total episodes	10	16.30	8.42	10	20.10	8.27	.32(ns)

As shown in Table 2, no statistically significant difference was found between the pairs of participants doing the dictogloss task and the pairs of participants doing the jigsaw task in comparing the average number of lexis-based LREs, the average number of form-based LREs, and the total number of LREs, as analyzed by using two-tailed t-test. A significant result is indicated when the probability is less than .05 (*<.05), but the analysis shows that the level of significance of three kinds of comparison is higher than .05 (*>.05) (lexis-based LREs = .51, form-based=.29, total episodes =.32).

This part answers research question 1: Is there any difference in language-related episodes, both lexis-based LREs and form-based LREs between the students in Groups J and D? The answer is that no significant difference was found in counting of total episodes, lexis-based LREs and form-based LREs between participants from the two different groups. It can be interpreted that the participants from two different groups generate an equal average number of LREs.

Comparison of Core Pre-Test and Core Post-Test Scores

All participants had to do a core pre- and core-post test about the simple past tense. They did the core pre-test in the beginning of studying simple past tense and the core post-test was given to them one week later after they finished doing the

tasks. Table 3 shows the comparison between the core pre-test and the core post-test scores for each group, and table 4 compares the core post-test scores between the two groups.

Table 3

Comparison of Core Pre-Test and Core Post-Test Scores
(N= individual students; Mean: minimum −20, maximum = 20)

Group	Test	N	Mean	S.D.	Sig.
Group J	Pre-test	20	2.85	3.69	.00
	Post-test	20	7.83	5.19	
Group D	Pre-test	20	1.65	4.10	.02
	Post-test	20	4.65	6.24	

According to Table 3, the results show that the core post-test scores of the two different groups are higher than the core pre-test scores, as analyzed by using a one-tailed t-test (Group J= .00, and Group D= .01). A significant result is indicated when the level of significance is less than .05 (*< .05). The results shown in the table gave the level of the significance between the core pre-test and the core post-test scores as less than .05, indicating that the scores of the core-post tests of the students from the two different groups were statistically significantly higher than the scores of the core pre-test. It can be concluded that the participants from both groups show a higher performance in the post-test, indicating learning progression.

Table 4

Comparison of Core Post-Test Scores between Group J and Group D
(N= individual students; Mean: minimum −20, maximum 20)

Group	Test	N	Mean	S.D.	Sig.
Group J	Post-test	20	7.83	5.19	.08
Group D	Post-test	20	4.65	6.24	

Table 4 shows that no statistically significant difference was found in the performance of groups J and D in the core post-test, as analyzed by using two-tailed t-test. This indicated that no group of students show greater learning. Research question 2 asked: Is there a difference in the performance of Groups J and D in the core post-test? The answer is that, as no significant difference was found in the performance of Groups J and D, participants in Groups J and D show equal language learning.

Effect of Collaborative Dialogue

This part reports and analyses the data related to the third objective: to study the relationship between the collaborative dialogue that emerges when participants are doing tasks and language learning. As stated in Chapter 3, there were three types of the test items; (A) items where the pairs came to a correct decision, (B) items where the pairs did not agree about the problem, and (C) items where the pairs came to an incorrect

decision. Table 5 shows the relationship between collaborative dialogue and language learning in the tailor-made post-test scores, analyzed by Chi-square.

Table 5

Relationship between Collaborative Dialogue and Language Learning in the Tailor-Made Post-Test Scores (N= individual students from group J and group D; Scores: minimum 0, maximum 40)

Test items	N	Observed scores	Expected scores	Chi-square (Sig.)
Type A items	40	25	23	.744
Type B items	40	23	23	.749
Type C items	40	22	23	.525
Total items	120	70	69	

Table 5 shows that no statistically significant associations were found between participants' collaborative dialogues and their language learning, since no significant difference was found between the observed scores and expected scores of three types of test items. A significant result was indicated when the level of significance was less than .05 (*< .05), but the results gave the level of significance between the observed and the expected scores as higher than .05. It indicated that there was no relationship between collaborative dialogue and students' language learning, as assessed by this test, so no significant difference was found between student scores on items derived from dialogue where

pairs come to an incorrect decision (Type C) and items derived from dialogues where they came to correct decisions (Type A). It can be concluded that there was no evidence that participants' collaborative dialogue that emerged when they were doing tasks had any effect on their language learning. There might be another factors that effect participants' learning, as will be discussed in the next chapter. The next section shows the result of written production of the participants from two different groups.

Quality of Written Narratives

In pairs the participants had to compose one story by using simple past tense. The results of the comparison of the quality of written narrative between the participants from Group J and Group D are discussed as follows.

Table 6

The Rating of the Written Narratives (N= number of pairs; maximum score is 5)

Rating part	Group J			Group D			Sig
	N	Mean	S.D.	N	Mean	S.D.	
Content	10	1.90	.61	10	1.95	1.01	.89 (ns)
Organization	10	1.85	.62	10	2.20	.82	.29 (ns)
Vocabulary	10	1.75	.71	10	1.95	.59	.50 (ns)
Morphology & Syntax	10	1.60	.65	10	1.90	.80	.44 (ns)

Objective 4 of the study was to compare the quality of written narratives between the participants from Groups J and D. A significant result is indicated when the level of significance is less than .05 (* <.05). As table 5 shows, the values for content (.89), organization (.29), vocabulary (.50), and morphology and syntax (.44) were higher than .05. The result showed that no statistically significant differences were found in the quality of written narrative between the participants from the two different groups. It can be interpreted that the participants from two different groups generated written narratives that were not of different quality.

This chapter provided information about the data analysis and the results of the study. Deeper discussion of the results will be included in the next chapter.