

CHAPTER IV

RESULTS OF DATA ANALYSIS

This chapter presents the results of the study in accordance with the 4 research questions. The first three research questions report the results from the writing achievement test concerning the effect of types of peer feedback and the effect of levels of general English proficiency and its interaction on the students' writing achievement. Two-way ANOVA was employed. For the fourth research question investigating the students' attitudes towards peer feedback they experienced, some remarkable results from the questionnaire, the learning log, and the interview were reported in order to triangulate and support the quantitative data for discussion. Descriptive statistics were utilized to provide the answer for this research question.

4.1 Results of the Study

In order to test whether or not the data for the analysis fit important basic assumptions of a parametric test like ANOVA, their normal distributions were tested by Shapiro-Wilk, and the homogeneity of variances was calculated using Levene Statistic. It was found that all the groups of the students had normal score distributions, and the homogeneity of variances was approved (see Appendix Q). As a result, two-way ANOVA was used.

4.1.1 A Comparison of the Main Effects of Types of Peer Feedback on the Students' Writing Achievement and the Effect size

In order to answer research questions 1-3, a two-way ANOVA was employed to investigate the main effect and the interaction effects of the types of peer feedback and levels of general English proficiency on the students' writing achievement. The findings are presented in the following table.

Table 4.1: Results of the main effect of types of peer feedback on the students' writing achievement from two –way ANOVA

Tests of Between-Subjects Effects

Dependent Variable: Writing Achievement Score

Source	Type III Sum of Squares	df	Mean Square	F	Partial Eta Squared	Eta Squared	Observed Power(a)
Levels of general English Proficiency	10982.108	2	5491.054	41.919*	.509	0.47	1.000
Types of peer feedback	1449.767	2	724.883	5.534*	.120	0.06	.841
Levels of general English Proficiency * Types of peer feedback	200.952	4	50.238	.384	.019	0.01	.134
Corrected Total	23243.229	89					

* $p < 0.05$

Results from the two-way ANOVA reveal that the F value of types of peer feedback was 5.534 and its p value was .0006. The p value from the calculation was less than the critical value set at 0.05. This shows that the first hypothesis stating that the mean scores of the writing achievement test of students receiving different types of peer feedback are not significantly different at 0.05 levels, was rejected. This means that the types of peer feedback had a significant effect on students' writing achievement.

According to Becker (2000), the effect size in ANOVA is the measures of the degree of association between an effect and the dependent variable (Becker, 2000b). The Eta squared effect size (the proportion of total variability attributable to a factor) is 0.06 meaning that the factor by itself accounted for 6% of the overall variance. The way to relate Eta squared to Cohen's effect size is described as follows (Barnette, 2006: slide no. 89; Wuensch, 2005):

Eta-squared of .0099 relates to a Cohen "small effect"

Eta-squared of .0588 relates to a Cohen "medium effect"

Eta-squared of .1379 relates to a Cohen "large effect"

Therefore, the Eta squared of 0.06 relates to “a medium effect” of Cohen’s effect size. In other words, the types of peer feedback had a medium effect on the students’ writing achievement. The Observed Power of 0.84 means that if the study is to be replicated 100 times, 84% of the replications correctly reject the null hypothesis. This shows that the reliability of the findings was high, so the findings can be trusted.

Since the differences of the students’ writing achievement from types of peer feedback were found, Scheffe’s test, a post-hoc comparison test for equal variance assume, was performed because the test tends to be conservative, in as much as it requires larger differences between means for significance than some other methods (Colman, 2001). In other words, if a comparison passes Scheffe’s test, it is such a big difference that the overall F has to be significant (Ulrich, 1997). For this reason, Scheffe’s test was selected in the mean comparison analysis to highly confirm the significantly mean differences of the results.

Table 4.2 illustrates that the students only in the web board peer feedback group performed differently from those in the paper-pencil peer feedback group, Scheffe’s (the mean score of paper-pencil peer feedback group – the mean score of web board peer feedback group) = -9.8167, $p < .05$. In contrast, the mean differences were not found between other pairs of peer feedback groups: 1) web board peer feedback group and e-mail peer feedback group, 2) e-mail peer feedback group and paper-pencil peer feedback group. The evidence of this case is also shown in Table 4.2 which the mean score of the students in the e-mail peer feedback group belongs to both subsets 1 and 2. This may be due to the fact that the more complex the experiment, the greater the risk of Type 1 errors. In order to solve this problem, it is suggested that the number of the students participating in the experiment should increase.

Table 4.2: Results of a post-hoc multiple comparison test of the three peer feedback types

Writing Achievement Score

	Types of peer feedback	N	Subset	
			1	2
Scheffe(a,b)	Paper-pencil	30	62.1567	
	E-mail	30	66.6033	66.6033
	Web board	30		71.9733
	Sig.		.327	.198

4.1.2 A Comparison of the Main Effects of Levels of General English Proficiency on the Students' Writing Achievement and the Effect Size

According to Table 4.1, the F value of significant difference resulting from levels of general English proficiency was 41.92. The p value was 0.001 which was lower than the critical value set at 0.05. This indicates the second hypothesis stating the mean scores of the writing achievement test of students who have different levels of general English proficiency initially were significantly different at 0.05 level was accepted. This means that levels of general English proficiency had a significant effect on writing achievement.

The Eta squared effect size is 0.47 meaning that the factor, levels of general English proficiency, by itself accounted for 47 % of the overall variance. To relate with Cohen's effect size, the magnitude of the Eta squared was considered as "a large" effect size. It could be said that levels of general English proficiency had a large effect on the students' writing achievement (Cohen, 1988).

Besides, Table 4.1 displays that the observed power of levels of general English proficiency factor equals 1.00 which is the highest possible value meaning that there is no chance of failing to detect the effect. It could be inferred that the reliability of the findings was very high.

Since there were three ability groups in the study, a post-hoc comparison was computed to identify where the differences occurred. Results of the Scheffe's test are presented in Table 4.3. It was found that the subjects in different general English

proficiency levels all performed differently. The high proficiency group performed differently from the moderate and the low proficiency one. Similarly, the moderate proficiency group performed differently from the low proficiency group. Considering the mean scores, it could be concluded that the high proficiency group performed better than the moderate proficiency group and the moderate group performed better than the low proficiency group.

Table 4.3: Results of a post-hoc multiple comparison test of the three levels of English proficiency

	Levels of proficiency	N	Subset		
			1	2	3
Scheffe(a,b)	Low	30	52.6400		
	Moderate	30		68.5433	
	High	30			79.5500
	Sig.		1.000	1.000	1.000

4.1.3 The Interaction Effect of Types of Peer Feedback and Levels of General English Proficiency on the Students' Writing Achievement and the Effect size

Theoretically, if an interaction is significant, it means that while one method of instruction did work better than the other; this may be due to the second factor (Hatch & Farhady, 1982). An interaction effect exists when differences on one factor depend on another factor.

In addition to the main effect, Table 4.1 illustrates the F -ratio for the interaction of 'types of peer feedback and 'general English proficiency on writing achievement was 0.38. The p value was 0.82 which was greater than the 0.05 critical value.

As a result, the third hypothesis which states that there is no interaction effect between types of peer feedback and levels of general English proficiency on students' writing achievement at 0.05 level, was accepted. In other words, there was no

significant interaction effect of 'types of peer feedback and 'general English proficiency on writing achievement.

The Eta squared effect size is 0.01 meaning that the interaction between types of peer feedback and levels of general English proficiency accounted for 1% of the total variability in the students' writing achievement. The magnitude of the Eta squared was considered as "small" effect size as interpreted by Cohen's d scale (Cohen, 1988).

Moreover, the observed power of the interaction effect is 0.1340 meaning that if the study is to be replicated 100 times, only 13.40% of the replications correctly reject the null hypothesis. It also shows that the reliability of the findings was very low.

The graphs presented in Figure 4.1a and b show the interaction of the proficiency levels and types of peer feedback. Normally, if the interaction effect exists, there would be a cross between the lines plotted from the mean scores. The plots in Figure 4.1a and 4.1b showed that there was no cross between any pairs of the three lines. It was obvious that high proficiency students performed better than moderate proficiency students, and moderate proficiency students performed better than low proficiency ones. In other words, regardless of different types of peer feedback they received, the students from the high proficiency levels received better writing achievement scores. In conclusion, this confirms that there was no interaction effect between types of peer feedback and levels of general English proficiency on the students' writing achievement.

Figure 4.1a: Plot of mean scores of the writing achievement test

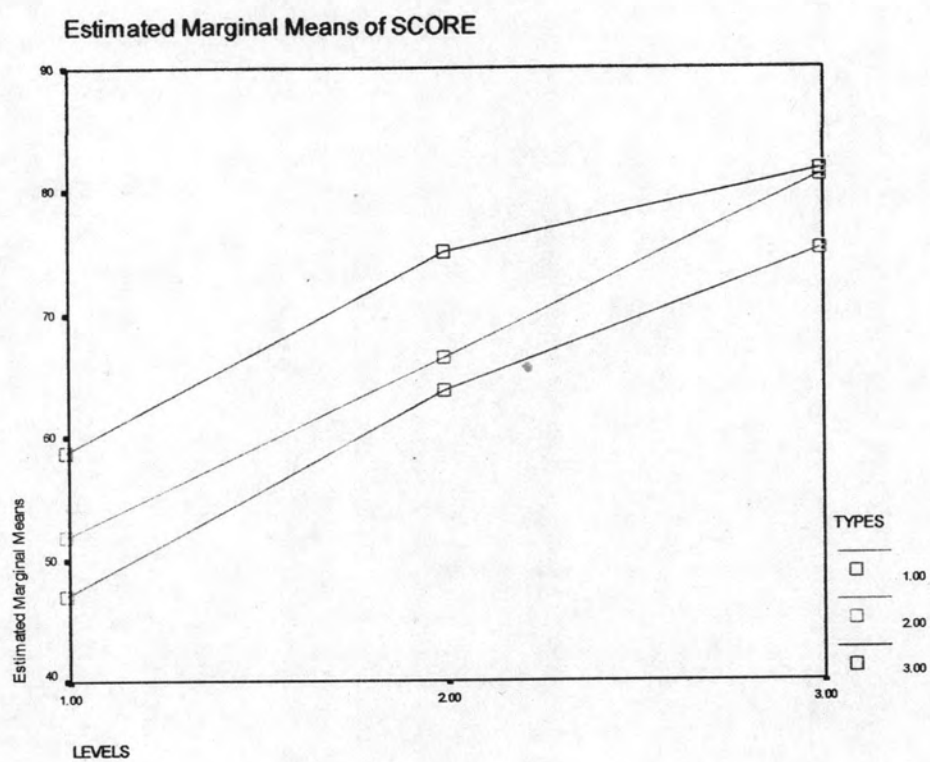
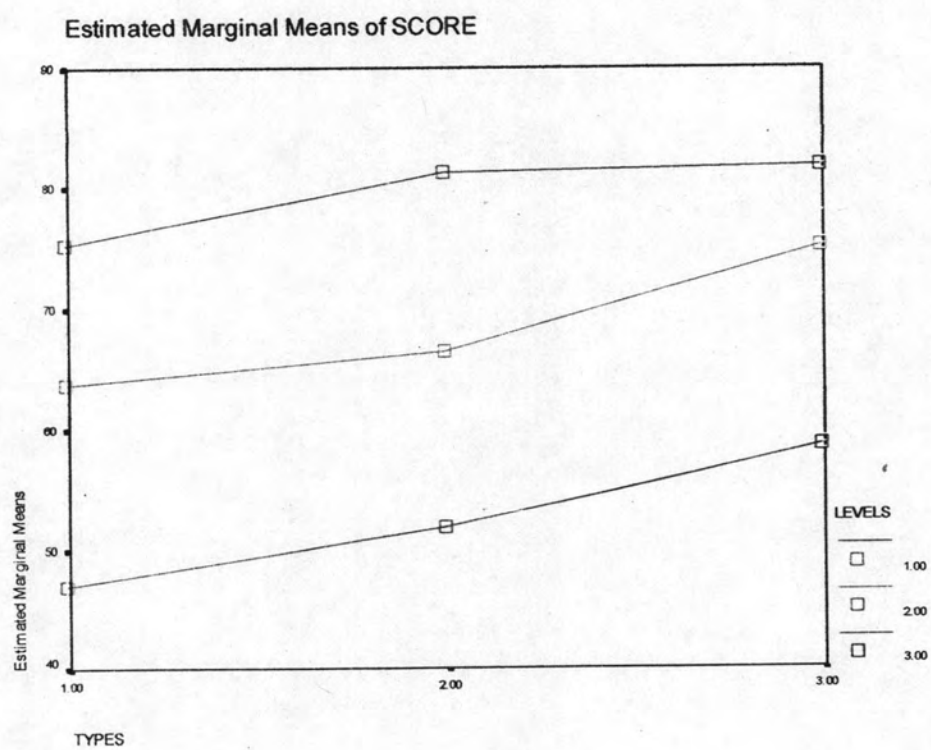


Figure 4.1b: Plot of mean scores of the writing achievement test



4.4 The Investigation of Students' Attitudes towards the Peer Feedback Type

What are the students' attitudes towards peer feedback they experience? The results from the questionnaire, the learning log, and the interview were reported under 6 main headings which are shown below. The complete qualitative data analyses and further details of the research instruments eliciting the students' responses are illustrated in Appendix R.

1. Attitudes towards Peer Feedback
2. Perceptions of the Students' Writing Improvement
3. Perceptions of the Quality of Peer Feedback
4. Attitudes towards Mixed Ability Peer Feedback Group
5. Strengths and Weaknesses of Peer Feedback They Received and

Suggestions

6. Attitudes towards Peer Feedback, Teacher Feedback, and Their Preferences

Attitudes towards Peer Feedback

When asking the students how they felt about peer feedback they received, most of the students from the three peer feedback groups liked and seemed to be satisfied with the type of peer feedback they experienced.

According to the interview, all of the students highly agreed that peer feedback was very useful for their writing improvement, and they gained advantages from this activity both as a writer and as a reader. The students from the three groups obviously emphasized on the similar point that peers could indicate their mistakes and provided useful suggestions to improve their work. They gained more knowledge in grammar and vocabulary. Moreover, they state that peer feedback encouraged student-student interactions that strengthen their relationships and taught them to accept other people' opinions. This inevitably helped them improve their writing.

This can be supported by the findings from the questionnaire. The results showed that the three peer feedback groups had highly positive attitudes toward peer feedback they experienced. Means of the paper-pencil, e-mail, and web board peer feedback were 3.86, 3.81, and 4.02 respectively. The learning log also revealed that the students from the three peer feedback groups expressed their highly positive responses towards the writing assignment in both phase 1 and phase 2. It is noted that

the negative responses in phase 2 was lesser than those in phase 1. It could be said that the students had more positive opinions as the time progressed.

The negative attitudes toward peer feedback were also found from the interview as well, but all of them derived from low proficiency students. One in the paper-pencil group said, "it's hard to find errors or feedback to friends because I have poor English background, so I am not sure whether my feedback is useful, but I solve this problem by reviewing what I have learned in the class and seeking knowledge from other sources out of class." As a result, it quite takes time for them to complete the task. Another complaint was from two low proficiency students in the web board group saying, "Sometimes the feedback I received from peers are too much direct and it hurts my feelings." From the learning log, being unconfident in giving correct feedback seemed to be a major concern of the student as a reader in the three peer feedback groups, but this anxiety seemed to lessen after half of the semester.

All in all, the results provide evidence that students had quite similar positive attitudes although they received a different type of peer feedback. This suggests that the students in the three types of peer feedback groups accept the peer feedback as a very good and useful method to improve their writing ability.

Perceptions of the Students' Writing Improvement

The interview also yielded the students' perceptions of their own writing improvement. Results illustrated that all of the students in the three peer feedback groups agreed that they were more confident in writing after taking peer feedback because of several interesting reasons. All students believed that their writing was improving for both fluency and accuracy as the semester progressed because they learned more in the course content and out of sources such as grammar books, from others' friends' mistakes, and from peers' comments as well. High proficiency students in the paper-pencil group reported that they were more confident when they received positive response and compliment from friends. In addition, low proficiency students from the three peer feedback groups added that they were so proud that they could give feedback to higher ability friends. This made them more confident.

The questionnaire illustrated that all the three peer feedback groups mentioned that peer feedback helped them improve their paper in terms of vocabulary (item 29), followed by reading other friends' paper helps them in term of

organization (item 27), and I find that reading other friends' paper help me produce a better second draft (item 25). All highly disagreed with item 23, I think the process of peer feedback cannot help me write with high accuracy and item 24, my writing cannot improve after getting peer feedback with the means were 1.97 and 2.20 respectively.

In sum, it could be concluded from the findings that the students in the three peer feedback groups perceived that their writing was improving as the time progressed, so peer feedback should be introduced to the EFL writing class without reluctance.

Perceptions of the Quality of Peer Feedback

The interview revealed the students' attitudes toward the quality of the peer feedback they received, and what aspects of peer feedback they considered as useful to implement in their essay were also identified.

When asked about the reliability of the feedback the students had to provide after reading their friends' first drafts, all of the students in the three peer feedback groups believed that their feedback was useful to friends' writing in some degrees. The students from the high proficiency group said that they were confident in the quality and the correctness of the feedback because they checked it from reliable sources such as grammar book before. They would not give unconfident feedback because of their high responsibility. Two moderate proficiency students in the paper-pencil group added that although they were not sure about the feedback they had given, they thought they should let the writers know to make them recheck once again. It helped them have critical thinking about to use or not to use those comments. The low proficiency students reported that although they might not give feedback on grammar due to their insufficient knowledge, they tried to study more from other sources and they focused more on content, and they were proud if they could give feedback to higher ability friends. In contrast, one stated that he was under pressure and uncomfortable to give feedback to high ability group.

Most of the students in the e-mail group said that some feedback from lower ability was not useful at the beginning but the quality of the feedback improved as the semester progressed. This may be due to the fact that they might need more time to

shift from dependent learner to independent learner, required more time for adaptation, and were familiar with other friends in the subgroup.

When asked about which elements from peer feedback were helpful to their writing development, most of the students in the paper-pencil group viewed that grammar seemed to be the most frequently received feedback from higher ability peers while feedback on the content was mostly distributed from lower ability group. The results from the e-mail and web board peer feedback groups resembled the paper-pencil group. Moreover, the learning log and the questionnaire also yielded the same results.

Interestingly, all of the students from different proficiency groups said that they would not believe peer feedback or took it into account until they checked whether the given feedback was right or wrong. They were willingly to take advice and implement it in their essays if they found that they definitely did something wrong or the feedback was reasonable enough.

According to the straightforwardness of feedback, most of the students in the paper-pencil group said they used polite words when they wrote feedback. Most of the time, they gave the correct answers instead of explaining in sentences to avoid conflict or hurt anyone's feelings when negative feedback was given. Moreover, one student said that they were more careful when he gave comments to girl friends rather than boy friends. Furthermore, the students from the high and moderate proficiency groups felt that lower ability students are afraid of giving comments and suggestions to higher ability students because they felt that they were more competent and the given comments might be incorrect. However, one student said that they were so close to friends and got familiar with them, so he could give direct and honest feedback as he would like to. He said there was an agreement among group members to give ultimate advantages of this activity. He added that he would feel *Kreng Jai* to whom he was not familiar with.

When asked the students in the email peer feedback group about the straightforward of peer feedback, most of the students in the high ability group said it could lessen the cultural trait, *Kreng Jai*, because work was submitted via e-mail and less confront with face to face conversation. One student said that she used words carefully to avoid hurting them. One student added that the group should have high ability for discussion because low ability quite believed what the high ability said

without using critical thinking. For the moderate group, only one girl student said she was more careful to use more polite words because she was concerned on other friends' feelings. Two boy students said they felt *Kreng Jai* at the beginning but felt more relaxed and could give useful feedback after the first assignment. One from low ability students said they were afraid of giving feedback to high ability students because they knew those were good at English, but he was more confident after the semester progressed. Moreover, one student said that he felt that friends tried to avoid giving direct feedback and saved their feelings by using indirect words.

Interestingly enough, the students in the web board peer feedback group seemed not to have problems with Thai cultural traits such as *Kreng Jai* like the paper-pencil and the e-mail peer feedback groups. This conforms to the questionnaire results that the students highly disagreed with item 47 stating I am afraid to comment the papers or to point out the mistakes for fear that my friends might be offended ($\bar{X} = 2.37$). Moreover, most of them reported that they could give sincere feedback without the fear of making friends embarrassed or creating bad feelings. Moreover, the students in the low proficiency group said that they felt more relaxed in providing feedback to higher ability friends. Although all of the students agreed that they received honest and frank feedback from their friends in the subgroup, some students said that some comments hurt their feelings, and they received more negative comments rather than positive comments. One student said that she felt bad sometimes but accepted it because what friends' comments were right and useful.

Attitudes towards Mixed Ability Peer Feedback Group

Based on the questionnaire, when examining the attitudes toward peer groups, the results illustrated that all the three groups highly agreed that they did not mind sharing their writing with the peer groups although they had different English proficiency (item 18 and 19), and they thought that it was good to have a variety of peers' opinions (item 21). Besides, all the three groups also shared the same point of view that they disagreed with item 17, I feel embarrassed to share my thoughts with my peer group.

The interview also revealed the students' attitudes toward working with the mixed ability friends that all of the students stated that they did not mind working in the subgroup which was composed of 2 high, 2 moderate, and 2 low students.

Paper-pencil peer feedback group

All of the students in the paper-pencil group said that they liked to study with mixed ability group due to many reasons. The students from the high proficiency group asserted they felt good and were willing to help others improve their work. They also said that low ability students could also give useful feedback to them, especially different ideas that they could use in their work.

Moreover, most of the students thought that they preferred working in the same group rather than changing group from time to time because it was easier for them to submit work to friends whom they already knew. Moreover, they also knew the strengths and weaknesses of their friends' writing and would feel more familiar working with the same group. This could allow them to lessen such cultural traits such as *Kreng Jai*. Besides, 3 students from low proficiency levels obviously stated that they felt less pressure to work with mixed ability group.

E-mail peer feedback group

The results revealed that although all of the students did not mind working in the mixed ability group arranged by the teacher, it would be more preferable if they had an opportunity to select friends by themselves. One moderate proficiency student said he had more fun working with close friends. Moreover, more than half said they would like to change group to see varieties of writing. In contrast, one high proficiency student commented that he preferred having high ability students in his group in order to have more discussion. It seemed that the relationship among this group might not be as close as paper-pencil peer feedback group, so most of the students preferred not to stick with the same friends.

Web board peer feedback group

The opinions of the students in the web board group revealed that all of them prefer working with mixed ability students. Only two of them would like to change group to see the variety of writing while other students reasoned that they would like to work in the same group throughout the semester since it was better to see the development of friends' writing, and this might help their friends write better.

Strengths and Weaknesses of Peer Feedback They Received and Suggestions

Paper-pencil peer feedback group

In regard to the strengths of paper-pencil peer feedback, most of the students said it was easier to give comments as they could circle the errors on papers, but they could not do this via e-mail and web board. Moreover, they thought that they gained more on writing on the papers rather than typing since they had to write over and over by themselves so they reminded their mistakes very well. Some added that reading papers was more comfortable than reading on the computer screen, and they could read and take it with them whenever and wherever too.

Based on the weaknesses of paper-pencil peer feedback, the students identified the weaknesses of paper-pencil peer feedback as follows:

A lot of papers involve, and it is such a waste of time copying and distributed papers to other friends in the group.

It is hard to make appointment to exchange work because we are studying in different subjects.

The available spaces for comments are not sufficient for me to write all what I want, but sometimes in the other way around I have nothing much to write.

I think it is hard to collect work and can lose it easily.

More than half of the students complained about poor handwriting of their friends as saying, "I have difficulty in reading friends' handwriting. Poor handwriting is one barrier that reduces my motivation to read. It is extremely hard for me to understand and leads me not to willingly give feedback."

One student who is good at computer and typing skills stated that peer feedback process could be much better if integrating with technology because it would be more convenient to write, give, and receive feedback. Moreover, he could search knowledge from the Internet for checking the correctness of the received feedback and searching information for commenting on friends' papers as well. Moreover, he thought that he could write longer and provide more detailed feedback as they would like to.

Another low proficiency student commented it was very slow to receive feedback because she has to wait until she met other friends. Moreover, it took time because cut and paste functions were not provided.

For the suggestions, the open-ended questionnaire showed that 6 students recommended to decrease the number of assignments from 4 essays to 2 or 3; a few students suggested that it would be better not to work in the same group throughout the semester; and 2 students proposed that the number of the students in the subgroup should be reduced from 6 to 4. Besides, 6 students said it is not necessary to change anything because it is already good in their opinions while 10 students did not answer the item.

E-mail peer feedback group

The results revealed the strengths of e-mail peer feedback as it was convenient to use. The students could send work anytime, had unlimited spaces to give comments and discussion, they did not have to worry about losing assignments, and they could get through the sources from the Internet easily. One said, "Using e-mail in learning English is very trendy and no other courses do it, so not only writing skills but also technology skills I attain." One low proficiency student stated that technology was quite new to him and he apprehended at first because he didn't have an e-mail address.

When asked about the drawbacks of e-mail peer feedback, all of them said that the Internet accessibility was the major barrier as well as the speed of the Internet. Similar to the learning log, the technology problem was mentioned most in phase 2 as the difficulty the students had to encounter. Some students complained that they did not have a computer at home so they had problems of late work and feedback submission. Some students said that they had to check e-mail every day whether the feedback from their friends was sent or not. One stated that writing by themselves made them remember the errors better than typing. Moreover, writing via e-mail was contradictory to the exam condition that paper not a computer was used, and it was sometimes inconvenient to find previous e-mail that might be intentionally deleted. A few moderate and low proficiency students who were not good at computer said their typing skill was getting improved and they also gained technology competence.

Focusing on the suggestions, the open-ended questionnaire revealed that 4 students recommended reducing the number of assignments and a few students proposed working with different group. Some asks for more effort and responsibility from the peers' part by increasing the scores on the activity while 3 students

suggested special language training for low proficiency students. Moreover, 4 students said that applying web board as a mean for communication instead of e-mail should be taken into account as it is more convenient from their own technology experience. Besides, 11 students commented it was not necessary to change anything while 4 students did not answer the item.

Web board peer feedback group

The results from the interview revealed the strengths of the web board peer feedback in many aspects. All of the students addressed its convenience for communication as the first priority without time and place restriction and basic computer functions such as cut and paste was provided, so it was easier to make correction.

Second would be anonymity environment which made them freer to express their true thoughts and feelings without considering “Kreng Jai” as one of Thai cultural traits. Moreover, most of the students from the high and low proficiency levels said that web board was an effective tool for data management system as they could browse to their previous work or other friends’ work easily. This also allowed them to read and learned from other friends’ comments which were publicly shown on the web board. Another strength claimed by a number of students was the sense of publicness of their work. One said, “I am very proud of myself as my work is shown online although I feel embarrassed at first.” Another said, I am more confident in my feedback if there is other friends give comments on the same points.”

According to the weaknesses of the web board peer feedback, the Internet accessibility and low speed and poor Internet connection were the major difficulties of the web board group. Two moderate students expressed that feedback sometimes hurt their feelings because it was too much direct. The students from low proficiency levels complained that sometimes they were confused and did not know which comments should be taken into account due to a lot of comments posted.

In the suggestion part, the open-ended questionnaire revealed that 5 students recommended reducing the number of assignments; a few students proposed working with different group while a few proposed some strong punishment for the irresponsible students who did not submit work and feedback on time. Besides, 17

students commented it was already good and not necessary to change anything. Three did not response to this item.

Attitudes towards Peer Feedback, Teacher Feedback, and Their Preferences

Paper-pencil peer feedback group

Comparing to teacher feedback, all the students in the paper pencil group seemed to be satisfied to have peer feedback from their friends. One high proficiency student reported, "I think both teacher and peer feedback are useful, but it doesn't work if only peer feedback is implemented." Besides, moderate students believed that teacher feedback is needed, and it could be appropriately implemented only after peer feedback.

Interestingly enough one student stated that he gained more and different ideas from friends rather than from the teacher. He enjoyed receiving and sharing ideas which were possibly right or wrong because he could make a decision on what comments should be incorporated in the essay while he had to believe in teacher feedback without critical thinking or going back to recheck because he had to correct whatever the teacher said. It seemed that he could not refuse teacher feedback.

Moreover, two thought that if the teacher gives feedback on a first draft, he will lose motivation and feels bad because of red pen or correction of every sentence. As a result, they preferred receiving peer feedback before receiving feedback from the teacher.

E-mail peer feedback group

Like the students in the paper-pencil peer feedback group, although teacher feedback is necessary in the students' opinion, most students showed their preference on peer feedback with giving reasons that they could receive different ideas from friends, and gained critical thinking skill on what comments should be useful to their writing while teacher feedback was always correct and they had to follow what the teacher said. In addition, most of them reported that they would like to share opinions and received different feedback from friends because this was hard to do with the teacher since she might not have time.

In contrast, one stated that she preferred teacher feedback because she was confident that it was one hundred percent correct, and she did not have to waste time checking its correctness.

Web board peer feedback group

All the nine students in the web board group expressed a similar opinion that they liked peer feedback because they could receive more ideas from peer feedback rather than from teacher feedback. Most of them also agreed that feedback from teacher was slow although it was more reliable. Moreover, all low proficient students emphasized that peer comments were less stressful not like teacher comments, and it made students think critically whether to implement feedback or not in their writing. However, some stated that they felt more confident in their writing when errors were indicated by the teacher in their second drafts. As a result, it could be said that both types of feedback could be continuingly taken in the writing course especially peer feedback because of the students' preference.

In conclusion, this part provides the research results of the qualitative data analyses from three research instruments: the questionnaire, the learning log, and the interview, with the aim of gaining more in-depth data to answer the fourth research question asking about the students' attitudes toward peer feedback they received in various perspectives. Since the results in this part are rich in details, in order to provide readers with much clearer picture, a summary of the key findings of the study is shown in Appendix S.

4.2 Conclusion of the Chapter

The results provide answers to research questions 1-4 as follows:

1. The different types of peer feedback had a significantly different effect on the students' writing achievement. It was found that the students in the web board group performed differently from the students in paper-pencil peer feedback group while the differences were not found between other pairs. The magnitude of the effect size was medium.
2. The levels of general English proficiency had a significant effect on the students' writing achievement. Students in different ability groups all performed differently. The magnitude of the effect size of this factor was large.

3. There was no interaction effect between types of peer feedback and levels of general English proficiency on the students' writing achievement. High proficiency students in the three groups performed better than the moderate proficiency students who performed better than the low proficiency ones regardless of the types of peer feedback they received.

4. The attitudes towards peer feedback of the three experimental groups were more or less the same. They had highly positive attitudes in most aspects explored. The confirmation can also derive from the learner log. Besides, results of the interview revealed more in-depth data that the students seemed to be satisfied with the peer feedback they experienced regardless of their proficiency levels.