



Exploring EFL Students' Attitudes toward Proficiency Pairing Methods

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Abstract. Researchers have shown a growing interest in elaborating proficiency pairing methods in recent years. However, research on students' attitudes toward different pairing methods is rarely investigated. This study aimed to explore students' attitudes toward different proficiency pairing methods (H-H, L-L, H-L) and the differences in their attitudes toward each pairing method. Sixty university students in Indonesia were involved in this study. A close-ended questionnaire and a semi-structured interview were employed to identify the students' attitudes toward each pairing method. The researchers used descriptive statistics to describe students' attitudes toward proficiency pairing groups and the Kruskal-Wallis test to reveal the differences in the attitudes of each pairing group. The results remarked that students in H-H pairing had the most positive attitudes toward the H-H pairing, followed by H-L pairing. The students enjoyed working on H-H and H-L pairing and believed that such pairing methods could improve the content, organization, grammar, vocabulary, and mechanics of their writing. Conversely, students in L-L pairing showed negative attitudes toward the pairing because they did not see any benefit of working with the same low-proficient partners. Further results indicated that students in those three pairing methods have shown significant differences in their attitudes toward each pairing method. Recommendations were presented after the conclusion section of this study.

Keywords: students' attitudes, proficiency pairing method, different-proficiency partner, equal proficiency partners

1. INTRODUCTION

There has been considerable attention to collaborative writing (CW) from numerous studies in the last two decades (Bhowmik, Hilman & Roy, 2018; Dobao, 2012; McDonough, 2004; Masuara, Basthomi, Suci, & Anggraini, 2022; McDonough & Vleeschauwer, 2019; Storch & Aldosari, 2013; Watanabe, 2008). CW affords learners ample opportunities for target language use when learners actively participate in the entire writing process and provide assistance to each other (Dobao, 2014; Storch & Aldosari, 2013). It also improves the grammatical accuracy and lexis of the learners' written product (Nassaji & Tan, 2010; Storch, 2011). CW is beneficial since it allows learners to pool their linguistic resources and co-construct language knowledge to solve

language-related problems they encounter during collaboration (Masuara & Ajam, 2023; Swain, 2006). Writing in pairs also positively affects students' L2 acquisition (Bikowski & Vithanage, 2016) and helps reduce learners' writing anxiety during the collaborative writing phases (McDonough, 2004).

Further studies looked at students' perceptions and attitudes toward CW to afford additional insights into the benefits of CW tasks (Elola & Oskoz, 2010; Fauziah & Latief, 2015; Hanjani, 2015; Shehadeh, 2011; Storch, 2005; Vorobel & Kim, 2017). Perception was defined as learners' processes of receiving information in a context and interpreting it as it relates to them (Gibson, 1979). In contrast, attitude refers to a reaction to particular objects or referents (language) based on an individual's beliefs, opinions, or evaluations about the objects or referents (Gardner, 1985). Based on these concepts, students' perceptions of collaborative writing mean students' views or interpretations of collaborative writing, whereas students' attitudes refer to their evaluations/judgments (either positive or negative) toward collaborative writing based on their perceptions. In other words, students' attitudes toward collaborative writing can be referred to as students' overall judgment towards collaborative writing practices, and their perceptions can be positive or negative (Chen & Yu, 2019).

A preponderance of studies (Cady, 2011; Cheng & Yun, 2019; Nassaji & Tian, 2010; Vorobel & Kim, 2017) investigated students' attitudes toward CW tasks. For example, Nassaji and Tian (2010) revealed that students reacted positively to CW since it improved their writing quality, particularly in grammar, organization, content, and vocabulary. Low intermediate students in Shehadeh's (2011) study were also reported to favor collaborative writing as they could scaffold to their same proficiency partner during the collaboration phases. Similarly, Cady (2011) reported that students were highly interested in learning when they worked homogeneously to heterogeneous working. Meanwhile, Chen and Yung (2019) reveal that homogeneous pairs (high-high) had contrasting attitudes toward CW activity: one perceived CW tasks positively, and another perceived CW negatively. Fauziah and Latief (2015) discovered that students had more positive attitudes towards heterogeneous than homogeneous pairing. As they showed, the higher-ability students had opportunities to assist their less proficient peers, and lower-ability students gained advantages from tutoring and the performance of high-ability students. The students also expressed their interest in learning and self-confidence improved as they collaborated with their heterogeneous partners. Elola and Oskoz (2010) tried to investigate advanced Spanish students working homogeneously in a writing task using web-based social tools Wikis and Chats. The findings demonstrated that learners enjoyed the CW experience and felt that the CW task contributed considerably to their quality of L2 writing, particularly in content and structure.

Meanwhile, other studies (McDonough, 2004; Garrett & Shortall, 2002) unpacked that learners with similar proficiency did not perceive pair activities as useful for grammar and vocabulary learning. This was in line with Dobao and Blum's (2013) study, which found that a third of the students reacted negatively to CW activity. They found that collaboration with partners from similar proficiency levels could not assist them in improving their knowledge of grammar and vocabulary because they have the same language ability. Interestingly, Vorobel and Kim (2017) showed that although the majority of students perceived collaborative writing practices as useful because they received constructive feedback from their peers during the collaboration, few negative

perceptions regarding challenges with revisions and concerns about their peers' feelings while working with their partners were also raised in their study.

Based on the literature stated above, learners have different attitudes towards CW practices: some studies indicated that students have positive attitudes concerning the content, organization, and/or linguistic accuracy of their writing products as they work collaboratively with their similar proficiency partners (Elola & Eskoz, 2010; Shehadeh, 2011; Vorabel & Kim, 2017), while other studies pinpointed few negative attitudes of learners regarding challenges in revision and fear of hurting peers' feelings during pair collaboration (McDonough, 2004; Storch, 2005; Vorabel & Kim, 2017). These contradictory findings need to be further investigated to reveal students' attitudes based on different pairing types because earlier studies only focused on looking at students' attitudes toward one type of pairing method, not covering their attitudes toward various pairing methods (Fauziah & Latief, 2015; McDonough, 2004; Garrett & Shortall, 2002; Dobao & Blooms, 2013). Thus, this study aimed to explore students' attitudes toward different proficiency pairing methods (H-H, L-L, H-L) and their attitudes toward each pairing method.

2. METHOD

This study employed a mixed-method approach covering data collection and analysis techniques (Creswell, 2014). The quantitative phase of this research was employed through a questionnaire using a 5 Likert-scale point ranging from 1 (strongly disagree) to 5 (strongly agree) to elaborate the students' attitudes toward different pairing methods. In contrast, the qualitative phase was conducted via semi-structured interviews to triangulate the questionnaire's results.

This study was conducted in the English Departments of a state university and a private university in Ternate, North Maluku, Indonesia. It involved sixty students from the third semester, 42 females and 18 males. The involvement of participants from two different universities was due to the imbalanced number of high achievers and low achievers in the first university where the study was conducted. Obtaining an equal number of high and low achievers was important because this study focused on students' collaboration based on different pairing methods (H-H, H-L, L-L). Finally, sixty students were grouped into H-H (7 pairs), H-L (15 pairs), L-L (7 pairs). They were classified as high or low achievers based on their TOEFL prediction test conducted in the first meeting: high achievers were those whose scores were equal to and higher than 440, and low achievers were those whose scores were lower than 440 (Susanti et al., 2020).

This research data included a writing test completed by students using three pairing methods (H-H, H-L, L-L), a questionnaire, and a semi-structured interview. The writing test, a descriptive essay, was administered in the sixth meeting in the face-to-face classroom setting. A close-ended questionnaire was distributed to the participants immediately after completing the writing test in the sixth meeting. The questionnaire items were adopted based on Chen and Yu's (2019) study. Their study had three questions to gauge learners' attitudes toward collaborative writing.

Meanwhile, this present study had six questions to determine students' overall attitudes toward H-H, H-L, and L-L pairing methods. Question 1 aimed to discover students' overall attitude toward collaborative writing, whereas question 2- 6 explored students' beliefs and evaluation about the usefulness of collaborative writing based on pairing methods. Time allocation for completing the questionnaire was 14 to 23 minutes (adapted from Shehadeh's study in 2011).

Twelve students (two pairs from H-H, two from H-L, and two from L-L) were selected to attend a semi-structured interview to clarify and elicit more personal views from the participants about their attitudes toward those pairing methods. A semi-structured interview is a popular data collection technique since it enhances the qualitative data and is flexible enough to provide detailed, accurate, and precise conceptions of what the participants think of the phenomenon under study (Creswell, 2008). In this study, the interview was recorded and then transcribed; each interview lasted one hour. The interview questions were adopted from Chen and Yu's (2019) study.

Data of students' attitudes toward three pairing methods were analyzed by employing the Independent-Samples Kruskal-Wallis Test. This is because the data is non-parametric (not homogenous and not normally distributed) and consists of ordinal data (six statements related to students' attitudes towards both pairing methods) formulated based on 5 Likert-scale points. Before presenting the difference in students' attitudes toward those pairing methods, six attitudinal statements were first averaged to get each statement's mean scores (descriptive data).

3. FINDINGS

Students' Attitudes Toward H-H, H-L, and L-L pairing methods

The statistical analysis results (table 1) demonstrate that students have different attitudes toward the pairing methods (H-H, H-L, L-L), as seen in their responses to the six attitudinal statements in the questionnaire. As the findings display, students in H-H pairing acquire the highest mean scores for all six attitudinal statements, in which the mean scores range from 3.64 to 4.21. These findings imply that highly proficient students in H-H pairing had very positive attitudes toward the H-H pairing method compared to other proficiency pairing methods (H-L and L-L). As the results display, H-H pairs believe that working with the same high-proficiency partner highly affect aspect of organization of their texts ($M = 4.21$, $SD = .699$), as well as the areas of mechanics ($M = 4.00$, $SD = .877$), vocabulary ($M = 3.93$, $SD = .829$), grammar ($M = 3.86$, $SD = .770$), and content ($M = 3.86$, $SD = .864$) of their texts. In addition, the students' attitudes toward the H-H pairing, in general, were also witnessed in the first attitudinal statement (enjoy CW in general), with a mean score of 3.64 (more than 3.00) with an SD of 1.008.

Table 1. Descriptive Statistics of Students' Attitudes Toward Each Pairing Method

	Enjoy CW in gen- eral	CW im- proves con- tent	CW en- hances organ- ization	CW im- proves gram- mar	CW en- riches vocab- ulary	CW in- creases me- chanics
ALL GROUPS						

Low-Low	N	16	16	16	16	16	16
	Me	2.53	3.00	2.53	2.53	2.53	2.93
	an						
	SD	1.302	1.000	1.125	1.060	1.060	1.335
	Mi	1	1	1	1	1	1
	n						
High-High	Ma	4	5	4	4	4	4
	x						
	N	14	14	14	14	14	14
	Me	3.64	3.86	4.21	3.86	3.93	4.00
	an						
	SD	1.008	.864	.699	.770	.829	.877
High-Low	Mi	2	2	3	3	3	3
	n						
	Ma	5	5	5	5	5	5
	x						
	N	30	30	30	30	30	30
	Me	3.63	3.75	3.87	3.78	3.94	3.84
Total	an						
	SD	1.008	.718	.793	.751	.759	.884
	Mi	2	2	2	2	3	2
	n						
	Ma	5	5	5	5	5	5
	x						
Total	N	60	60	60	60	60	60
	Me	3.36	3.57	3.74	3.49	3.59	3.56
	an						
	SD	1.170	.991	.929	1.010	1.039	1.057
	Mi	1	1	1	1	1	1
	n						
Total	Ma	5	5	5	5	5	5
	x						

It further indicates that students in the H-L pairing method achieve the second-highest mean scores for the six attitudinal statements toward the H-L pairing method, ranging from 3.63 to 3.94. These results signify that high-proficient and low-proficient students had positive attitudes toward their H-L pairing method: high-ability students viewed positively as they were paired with lower-proficient partners and low-ability students who recognized the merits of working with higher-proficient partners. The findings also shed light on how students using the H-L pairing method view their CW activity. The H-L pairing believes that the H-L pairing method affected the vocabulary aspect of their written texts ($M = 3.94$, $SD = .759$), compared to other language areas

such as organization ($M = 3.87$, $SD = .793$), mechanics ($M = 3.84$, $SD = .884$), grammar ($M = 3.78$, $SD = .751$), and content ($M = 3.75$, $SD = .718$).

Concerning the L-L pairing method, the results demonstrate that students in L-L pairing seem not to recognize the benefits of working with the same low proficient partners, indicated by low mean scores for the five attitudinal statements (mean score < 3). As displayed in Table 3.2.1, students in L-L pairing had low mean scores ($M = 2.53$, $SD = 1.302$) for the first attitudinal statement (enjoy CW in general). The low-ability students also perceive L-L pairing because they do not see the usefulness of working with the same proficient partners on improving specific language areas such as organization ($M = 2.53$, $SD = 1.125$), grammar ($M = 2.53$, $SD = 1.060$), vocabulary ($M = 2.53$, $SD = 1.060$, SD), mechanics ($M = 2.93$, $SD = 1.335$). A quite positive attitude of students towards L-L pairs was found in their beliefs that working with the same low-ability partners slightly affects content improvement ($M = 3.00$, $SD = 1.000$). These results disclosed students in L-L pairs had negative attitudes toward the L-L pairing method, particularly in seeing the merits of the L-L pairing method in improving five language areas of their written texts.

Differences in the Students' Attitudes Toward H-H, H-L, and L-L Pairing Methods

As Table 2 shows, the Sig. Values for six attitudinal statements are ranged from .000 to .049. These results are lower than .05 significance level, implying significant differences in the students' attitudes across all pairing methods (homogenous and heterogeneous pairing methods). As remarked in the table, students in H-H pairing, L-L pairing, and H-L pairing have different attitudes for viewing the benefits of CW in general and the specific areas of writing affected by proficiency pairing (statements 2 to 6). Further findings also strengthened the significant differences in the students' attitudes toward the pairing methods, in which the Sig. Value for the mean attitude towards all pairing methods is .000. This result signifies that the students significantly differ in their overall attitudes toward all pairing methods (H-H, L-L, and H-L).

Table 2. Differences in the Students' Attitudes Toward H-H, H-L, and L-L Pairing Methods

Null Hypthesis of Six Attitudinal Statements toward all pairing methods (H-H, H-L, L-L)	Test	Sig.
The distribution of Statement 1 (enjoy collaboration with partners) is the same across all pairing methods	Independent-Samples Kruskal-Wallis Test	.011

The distribution of Statement 2 (enjoy CW since it helps improve the content of writing) is the same across all pairing methods	Independent-Samples Kruskal-Wallis Test	.049
The distribution of Statement 3 (enjoy CW because it can enhance organization) is the same across all pairing methods	Independent-Samples Kruskal-Wallis Test	.001
The distribution of Statement 4 (enjoy CW because it improves grammatical aspects of writing) is the same across all pairing methods	Independent-Samples Kruskal-Wallis Test	.000
The distribution of Statement 5 (enjoy CW since it can enrich vocabulary) is the same across all pairing methods	Independent-Samples Kruskal-Wallis Test	.000
The distribution of statement 6 (enjoy CW because it assists in minimizing errors in spelling and punctuation) is the same across all pairing methods	Independent-Samples Kruskal-Wallis Test	.000
The distribution of Mean Attitude is the same across all pairing methods (H-H, L-L, and H-L)	Independent-Samples Kruskal-Wallis Test	.000

Detailed information on the pairwise comparison of each attitudinal statement was provided in the following tables. Three pairs of pairwise comparisons were analyzed: Low-low and high-high, low-low and high-low, and high-high and high-low.

Table 3. Pairwise Comparisons of First Attitudinal Statement (enjoy collaboration)

Sample 1-Sample 2	Sig.
Low-Low-High-High	.017
Low-Low-High-Low	.004
High-High-High-Low	.998

The table above reported that students in L-L and H-H pairings had remarkable differences in their attitudes regarding enjoyment of collaboration (first attitudinal statement), the sig value was .017 (<.05 level of significance). This was in line with the result of L-L and H-L pairings, who held contrastive views on seeing the enjoyment of collaborating with their partners (sig. value was .004). On the other hand, there were no significant differences in the attitudes toward H-H and H-L pairing, as shown in the sig. value (.998) which is higher than .05 level of significance.

Table 4. Pairwise Comparisons of Second Attitudinal Statement (enjoy CW since it helps improving content of writing)

Sample 1-Sample 2	Sig.
Low-Low-High-Low	.031

Low-Low-High-High	.030
High-Low-High-High	.674

As has been demonstrated in Table 4, students in L-L and H-L pairings had significant differences in viewing the positive impact of CW based on proficiency pairing on the content improvement. It was identified from the Sig. Value which is lower than .05 (sig. value was .031). This result was similar to the pairwise comparison of L-L and H-H pairing in perceiving the merits of proficiency pairing on writing content improvement (sig. value was .030). On the other hand, H-H pairing and H-L pairing have no significant differences in their evaluation of the usefulness of proficiency pairing on content improvement, as seen in the Sig. Value .674, which is higher than .05 level of significance.

Table 5. Pairwise Comparisons of Third Attitudinal Statement (enjoy CW because it can enhance organization)

Sample 1-Sample 2	Sig.
Low-Low-High-Low	.004
Low-Low-High-High	.000
High-Low-High-High	.215

Table 5 revealed that the pairwise comparison of L-L and H-L is significantly different in looking at the benefits of their proficiency pairing methods on the text organization enhancement. This can be seen that the Sig. Value score is .004 ($< .05$). Similarly, students in L-L pairing and H-H pairing have very contrastive views on seeing the benefits of their pairing method on enhancing their text organization, as seen in the Sig. Value (.000) is lower than .05. Conversely, the results show that students in H-H and H-L pairings are not different in recognizing the benefits of their proficiency pairing, as shown in the sig. value, that is .215 ($> .05$).

Table 6. Pairwise Comparisons of Fourth Attitudinal Statement (enjoy CW because it improves Grammatical aspects of writing)

Sample 1-Sample 2	Sig.
Low-Low-High-Low	.000
Low-Low-High-High	.001
High-Low-High-High	.849

Table 6 showed that students in L-L and H-L pairing have remarkable differences in seeing the usefulness of their proficiency pairing methods, in which the Sig. Value is .000 (lower than .05). This finding is in line with the pairwise comparison of students in L-L and H-H pairing who had notably different views on seeing the usefulness of their homogeneous pairing on the text grammatical improvement, as seen in the sig value which was .001 (< .05). On the other hand, H-H pairing and H-L pairing are not different in favor of CW task based on proficiency pairing, as shown in the sig. value (.849) which is higher than .05 level of significance.

Table 7. Pairwise Comparison of Fifth Attitudinal Statement (enjoy CW since it can enrich vocabulary)

Sample 1-Sample 2	Sig.
Low-Low-High-High	.001
Low-Low-High-Low	.000
High-High-High-Low	.952

As displayed in Table 7, Sig. Values of L-L and H-H as well as L-L and H-L, pairwise comparison in the fifth attitudinal statement, were .001 and .000, respectively. These results signified differences between students in those pairwise comparisons in seeing the usefulness of their proficiency pairing methods on their writing vocabulary enrichment. On the other hand, the results show that H-H pairing and H-L pairing methods are not different in viewing the effects of their proficiency pairing methods on their vocabulary enhancement, as seen in the sig. value (.952) that was higher than .05 level of significance.

Table 8. Pairwise Comparisons of the Sixth Attitudinal Statement (enjoy CW since it can minimize errors in spelling and pronunciation)

Sample 1-Sample 2	Sig.
Low-Low-High-Low	.000
Low-Low-High-High	.000
High-Low-High-High	.676

Table 8 displayed similarities of the Sig. Values of L-L and H-H as well as L-L and H-L pairwise comparison in the sixth attitudinal statement (.000 and .000, respectively). These findings suggest that students in those pairwise comparisons view the advantage of their proficiency pairing methods differently on the mechanics aspect of their written texts. On the other hand, the result unveiled that H-H pairing and H-L pairing methods are not different in perceiving the advantage of their proficiency pairing methods on the mechanic area of their writing, as seen in the Sig. Value (.676) that is higher than .05 level of significance.

Table 9. Pairwise Comparisons of Mean Attitude For the Six Attitudinal Statements

Sample 1-Sample 2	Sig.
Low-Low-High-Low	.000
Low-Low-High-High	.001
High-Low-High-High	.744

Table 9 shows that mean scores for the attitude of the six attitudinal statements are significantly different in the L-L and H-H pairing methods, which can be seen in the Sig. Values of L-L and H-H, which were .000 and .001, respectively). These findings suggest that students in those pairwise comparisons had significantly different attitudes on viewing proficiency pairing and its merits on five writing components (content, organization, grammar, vocabulary, and mechanics). On the other hand, the result unpacked that H-H pairing and H-L pairing methods are not different in perceiving proficiency pairing in general and its merits on five writing components (content, organization, grammar, vocabulary, and mechanics). This can be found in the sig. value (.744) that is higher than .05 level of significance.

Overall, in regards to proficiency pairing, L-L pairing (homogeneous) had different attitudes in viewing the merits of their work collaboration compared to H-H pairing (homogeneous pairing). The same situation also occurred in low-low pairing in the homogeneous pairing method, which has a very contrasting attitude with high-low pairing (heterogeneous pairing). These can be seen in the sig value of both pairwise comparisons (L-L and H-H, as well as L-L, and H-L) in Table 3 to Table 9, which were all lower than .05. (see those tables). This result signified that students from low-low pairing have different attitudes than those from high-high pairing, although they work with same-level proficiency partners. A similar finding is also seen in the low-low pairing that had different attitudes from the high-low pairing, who work with partners from different proficiency levels.

On the other hand, H-L and H-H are not different in viewing the merits of their collaborative work. This is indicated in all sig. values seen in tables 3 – 9 of the pairwise comparison which are higher than .05. These results infer that high proficiency students have no significant difference in viewing the merits of collaboration with lower proficiency partner (H-L) as well as they collaborated with the same high proficiency partner (H-H). In other words, high achievers generally have the same positive attitudes as they worked with lower partner (H-L) and the same high proficiency partner (H-H). The results reported in those tables are linear with the explanation of Student 9 (a high achiever in H-H pair) in the interview,

‘It does not matter for me, to work collaboratively with partners who are at the same level with me or from different level. For me, writing together has many benefits and I could perform well during the collaboration with any partner As I was paired with partner who was at different level with me, I can reinforce my knowledge when I

shared knowledge with her. On the other hand, my partner can learn from what I have shared too'.

A similar attitude was also found from another student. Student 6 (a high achiever in homogeneous pairing) states, *'I enjoy writing with a friend or some friends. Usually, I gain new knowledge when we work together, like new vocabulary, grammatical knowledge, and so on. It is fun, and I love it.*

In the end, the expressions from the two high achievers above remark that they have positive attitudes toward homogeneous and heterogeneous pairing. Those qualitative findings highly support the quantitative data, in which the high achievers have the same positive attitudes toward H-L and H-H pairing methods. It can also be inferred that highly proficient students in H-L and H-H pairings could see the merits of collaborative writing, no matter the proficiency level of the partners they worked with

4. DISCUSSION

The results demonstrated that high proficient students had very positive attitudes as they were paired homogeneously with equal high-proficiency partners. This finding confirmed the findings from Chen and Yu (2019) that highly proficient learners viewed the similar proficiency pairing positively, which led the learners to form a collaborative interaction pattern. This finding was consistent with prior research (Cheng & Yun, 2019; Nassaji & Tian, 2010) that highly proficient students reacted when grouped with the same proficient partners. They thought that such collaboration would lead to the improvement of grammar, organization, content, and vocabulary in their texts. This finding also supported the results from Susanti et al. (2020), which suggested that working in homogenous pairing led to the students' enjoyment because students might feel more comfortable and less embarrassed to have mutual interaction with the equal proficiency partner. These findings advocated an interesting point about the principle of equality and mutuality that might affect students' attitudes as they collaborated based on proficiency pairing.

This study also highlighted H-H pairs' beliefs that working with the same high-proficiency partner would affect their writing significantly, particularly in organization, mechanics, vocabulary, grammar, and content. These findings confirmed earlier studies (Cady, 2011; Cheg & Yun, 2019; Vorobel & Kim, 2017) that students reacted to CW positively since they firmly believed that CW assisted them in getting higher quality in terms of grammar, organization, content, and vocabulary. However, these results contradicted what was found by Dobao and Blum (2013), who found that a third of the students reacted negatively to CW activity. They found that collaboration with partners from similar proficiency levels could not assist them in improving their knowledge of grammar and vocabulary because they have the same language ability. In this regard, students had different views of seeing the merits of working with the same proficiency partners.

It was also noted that students in H-L pairing method viewed such a pairing positively. As indicated in this study, they believed that the H-L pairing method could improve vocabulary, organization, mechanics, grammar, and content. These findings supported the previous findings (Fauziah & Latief, 2016) that collaborative writing in the heterogeneous pairing method motivates them to produce a better essay regarding con-

tent, grammar, and organization, stimulates their thinking, and improves their confidence to write. The result of this study also confirmed the earlier study (Zamani, 2016) that students enjoyed working with stronger or weaker peers (heterogeneous pairing) because, in the students' view, collaboration contributed to their L2 writing quality.

Regarding students' attitudes toward L-L pairing method, it was clear that students in L-L pairing did not see the merits of working with the same low-proficient partners. These findings differed from the results in Shehadeh (2011), which showed that low learners perceived L-L pairing positively, enjoyed the experience, and regarded it as a source of learning to improve their grammatical knowledge and content of their written texts. These findings also contradicted the Storch's (2005) earlier finding that most students who participated in her study (16 of 18) were generally positive of the CW experience.

A more detailed finding in the pairwise comparison of L-L-H-L and L-L-H-H showed significant differences in viewing the pairing methods and the merits of the proficiency pairing methods. Likewise, low-low pairs had significantly different attitudes in collaboration than H-H pairs'. These findings suggested a further point to be examined more deeply: why those pairs showed different attitudes during the collaboration. The earlier studies (Cheng & Yun, 2019) indicated that students might behave differently or have different attitudes toward CW activity due to several factors, such as learning beliefs and prior experiences or perceived value of assistance that can shape students' attitudes toward collaborative writing.

A further interesting finding was significant differences in the students' attitudes across all pairing methods (H-H, H-L, and L-L). These findings confirmed previous studies (Cady, 2011; Shehadeh, 2011; Storch & Aldosari, 2012; Zamani, 2016) that showed different attitudes of students toward homogeneous and heterogeneous pairing methods. However, this study also shed light on the fact that the H-H and H-L pairings had no significant differences in their evaluation of the merits of CW. In this regard, this finding was contradicted by the study of Fauziah and Latief (2015). Overall, regarding the attitudes toward proficiency pairing, L-L pairing had different attitudes in viewing the merits of their work collaboration as compared with H-H pairing. Contrastingly, H-H and H-L pairing perceived such pairing methods positively.

5. CONCLUSION

This finding confirmed that high-proficiency students positively perceived two pairing methods (H-H and H-L pairing). They could see the benefits of working in those pairing types. On the other hand, low-proficiency students held unfavorable attitudes toward the L-L pairing method because they believed that such a pairing could not improve their writing skills, particularly in content, organization, grammar, vocabulary, and mechanics. Nonetheless, low-proficiency students perceived the H-L pairing method positively because they could learn from higher-proficient partners as they worked together in H-L pairing.

Another limitation to note is the small participant sample (60 students). Since the sample is not big, the findings of this study cannot be generalized. Involving more participants in further research is necessary to generalize the findings

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