Revisiting Proficiency Pairing in Collaborative Writing From an Equity Theory Perspective: Voices From High-Proficiency EFL Learners

Wenting Chen¹ and Yueh-Ting Lee²

Abstract

Although research on proficiency pairing for collaborative writing in second language (L2) or foreign language (FL) higher education has proliferated in the last few decades, scant attention has been paid to students’ perceptions about how they are paired up. This case study revisited proficiency pairing in light of equity theory, examining two high proficiency Chinese EFL learners’ perceptions of proficiency pairing and how their perceptions affected their actions in the collaborative writing process. The findings reveal that students with similar advanced L2 proficiency behaved differently during a collaborative writing process due to their different perceptions of proficiency pairing. This study also found that motivation, perceived self-value, and collaborative writing assessment were three major factors that shaped students’ perceptions of proficiency pairing. This study provides useful insights into methods for pairing learners in L2 writing classes and improving teacher education in L2 higher educational contexts.

Keywords

collaborative writing, equity theory, perceptions, proficiency pairing, FL writing, L2 writing

Introduction

Second language writing (L2) in higher education has undergone a paradigm shift from the traditional mode of language acquisition to the sociocultural view of learning (Lee, 2014). In line with this movement, there has been a surge of research interest in collaborative writing in L2 or foreign language (FL) learning contexts (face-to-face or computer mediated environments) over the last three decades (e.g., Storch, 2005). These studies have been informed by sociocultural theory, which posits that learning is a socially mediated process that can never be isolated from social interaction (Vygotsky, 1978). While prior literature has provided evidence for multiple benefits (e.g., raising audience awareness, increasing attention to forms, and enhancing social interaction) of collaborative writing (Shehadeh, 2011; Storch, 2002, 2005; Swain & Lapkin, 2001), one concern teachers often confront is how to best assign student partners in order to encourage learners’ engagement with and contribution to pair activities (Storch, 2013). Given that students may vary in terms of their L2 proficiency, teachers need to make important decisions whether to have students of similar or different L2 proficiency levels work together. Previous studies (e.g., Storch & Aldosari, 2012; Watanabe, 2008; Watanabe & Swain, 2007) have indicated that maximizing language learning opportunities has always been considered the primary yardstick in collaborative writing. Researchers have investigated language learning opportunities by focusing on analyzing patterns of interaction (Storch, 2002) and “languaging” opportunities that collaborative writing can afford learners (Swain, 2006). Specifically, Storch (2001; 2002) identified four patterns of interaction (collaborative, dominant/dominant, dominant/expert, and expert/novice) based on different traits: (1) pattern of contribution; (2) decision-making behavior; (3) nature of assistance; and (4) discourse and linguistic features. It has been reported that pairs displaying collaborative stances with high mutuality, such as collaborative and expert/novice patterns, experienced more transfer of knowledge, and were more conducive to language learning. “Languaging” refers to the process of making meaning and shaping knowledge through language (Swain et al., 2011). Opportunities for

¹Capital Normal University, Beijing, China
²Southern Illinois University Carbondale, USA

Corresponding Author:
Wenting Chen, Faculty of English, College English Department, Capital Normal University, Room 320, No. 4, 105 North Road, The Third Ring, Beijing 100037, China.
Email: 6501@cnu.edu.cn
To date, most studies that have examined different proficiency pairings of L2 learners have focused on the patterns of interaction learners exhibited, as well as the quality and quantity of LREs produced (e.g., Kim & McDonough, 2008; Lesser, 2004). For example, Lesser (2004) examined how proficiency pairing affected the degree to which dyads focused on form, the types of forms learners focused on, as well as how successful they were at resolving the language problems they encountered. He found the highest numbers came from LREs of high-high (H-H) pairs, followed by high-low (H-L) and low-low (L-L) pairs. H-H pairs had most LREs resolved correctly, most of which were grammatical. L-L pairs focused more on lexical problems and left a large number of LREs unresolved. In a similar vein, Storch and Aldosari (2013) built on Lesser’s study to explore the effect of proficiency pairing, as well as the dyadic relationships learners formed, and found the same results concerning the quantity of LREs. Additionally, they found that H–H, H–L, and L–L pairs all produced more lexical than grammatical LREs. However, their findings concerning the mixed-proficiency pairs differed because H-L pairs produced the lowest number of LREs when the low proficiency learners adopted very passive roles. They suggested that relationships in pair work may be an important consideration alongside relative L2 proficiency. Watanabe and Swain (2007) confirmed relationships in pair work outweighed proficiency differences in their investigation of the effects of L2 proficiency differences in L2 learning. They found that when learners engaged in collaborative patterns of interaction, they were more likely to achieve higher posttest scores regardless of their language proficiency.

The impact of learner proficiency in collaborative writing has also been discussed in different contexts. Kim and McDonough (2008) conducted a study in Korean-as-a-second-language contexts. The results of their study, on one hand, were consistent with findings from previous studies (e.g., Lesser, 2004; Storch & Aldosari, 2012; Storch & Wigglesworth, 2010), that higher proficiency dyads engaged more learning affordances (more lexical LREs and correctly resolved LREs). On the other hand, the results indicated learners showed different pair dynamics when collaborating with partners who had different proficiency levels. This seems to highlight a more complex bilateral influence between pair relationships and proficiency differences, indicating that the two factors may couple together in affecting language learning in collaborative writing. A recent study by Basterrechea and Lesser (2019) investigated how learner proficiency affected the amount, type (lexical or grammatical), and outcome (correct, incorrect, or unresolved) of LREs in content-and-language-integrated-learning contexts. This study found that there was a positive correlation between the number of LREs involving the target form and the learners’ proficiency. The findings also indicated a positive correlation between learner proficiency and correctly resolved grammatical LREs involving third person singular forms.

In sum, while previous research revealed that proficiency pairing has a considerable impact on language learning, such as focused language forms, the number of LREs, and patterns of interaction, the results documented were inconclusive. This is possibly because there are more affective factors (e.g., how students perceive the way they are paired or grouped) alongside language proficiency differences that affect the way students behave, as well as the effectiveness of their interaction (Wigglesworth & Storch, 2012). A number of studies have looked at learners’ attitudes toward collaborative writing activities and the impact of attitudinal differences on the process and product of collaboration (Chen & Hapgood, 2021, Chen & Yu, 2019; Storch, 2004). However, these studies focused on learners’ attitudes toward collaborative writing in general. What is less clear are learners’ possible attitudes toward proficiency pairing during the collaborative writing process, especially for students with higher proficiency since they may be less motivated to engage in pair or group work as they may have less confidence in the feedback provided by partners (Hu & Lam, 2010). In other words, why students like or dislike proficiency pairing (either paired with interlocutors of similar or different proficiency levels) and their actual responses in writing are still underexplored. Since learners’ perceptions of a learning activity influences their engagement with it, these factors may ultimately influence learning outcomes (Kormos, 2000; Storch & Wigglesworth, 2010). Thus, it is important to understand if learners’ perceptions of their pairings and their responses in actual writing tasks played a role in the inconclusive results found among pairings of different proficiency levels.

In every case of interaction that we could identify, there is at least the possibility that the actions of one person affected the other and vice versa. In any collaborative writing assignment, two students have to talk to each other and write together. Collaborative writing relations are, in essence, interaction between people in social activities (Vygotsky, 1978). According to social psychologists Thibaut and Kelley (1959), “by interaction, it meant that they emit behavior in each other’s presence, they create products of each other, or they communicate with each other” (p. 10). They further held that the consequence of interactions could be measured by rewards and costs. By rewards, they referred to “the pleasure, satisfactions, and gratifications the person enjoys” (Thibaut & Kelley, 1959, p. 12). By costs, they referred to “any factors that operate to inhibit or defer the performance of a sequence of behavior” (Thibaut & Kelley, p. 12). The consequences or outcomes of collaborative writing could be examined in terms of their rewards and costs, which brings us to equity theory (Adams, 1965; Romer, 1977; Samuel, 1978). In the collaborative writing process, collaboration
might not be equitable when high proficiency learners work with low proficiency learners. More specifically, if “Individuals A and B compare their relative outcomes [i.e., rewards, punishments (O)], and inputs [effort, skills, social worth, etc. (I)], they will be most satisfied when they believe their relationship to be an equitable one” (Samuel, 1978, p. 135). Mathematically, this can be stated as follows: OA/IA = OB/IB. For example, student A is a high proficiency learner and offers four good ideas and gets two (i.e., 2/4 or ½ or 0.5) while student B (a low proficiency learner) has just the opposite experience, getting four ideas and only offering two. Overall, student A’s benefit might be 0.5 whereas student B’s benefit might be 2. In this case, students A and B might not equally engage in collaborative writing, because the collaboration might be seen as unfair or inequitable for the more competent writer. Thus, it is meaningful to know whether or not students with higher language proficiency who may reward less in peer interactions would produce most LREs possible comparing to lower level students.

Previous research (e.g., Beard et al., 1989) has indicated that proper assessment systems for group work could help build equity and active participation. In collaborative writing tasks, assessment means grading the two assessable elements: the jointly written text (product) and the learners’ interaction (process) (Storch, 2013, 2017). The key to the assessment is to monitor learners’ contributions during the writing process. Providing encouragement to students as part of the assessment process offers opportunities to promote reflection and active engagement (Storch, 2005). Using peer and individual reflective diaries can offer the additional benefit of helping to monitor learners’ contributions during the collaborative writing process. However, very limited empirical research has been conducted on the assessment of collaborative writing tasks in L2 contexts because previous studies often drew on activities that were not graded (e.g., Dobao, 2014; Dobao & Blum, 2013; Storch, 2005; Storch & Aldosari, 2012).

While previous research emphasized that low proficiency students paired with high proficiency partners benefited the most (e.g., Leeser, 2004; Shin et al, 2016), no L2 research, to the best of my knowledge, has explored students’ perceptions of proficiency pairing and whether or not their preferences for pairing methods could affect their actions during the writing task. To fill this research gap, this study aims to revisit proficiency pairing in light of equity theory (Adams, 1965), seeking to explore two high proficiency Chinese EFL learners’ perceptions of proficiency pairing and how their perceptions affect their actions in the collaborative writing process. This study not only can contribute to our understanding of why learners behave and perform differently when working with interlocuters of similar and different proficiency levels, but it can also generate useful implications for how to better pair students in student-centered writing classrooms. Additionally, while Macdonald (2003) described a number of models for assessing online collaborative writing tasks, this study will shed new light on models for assessing in-class collaborative writing tasks, in order to provide insights into how grading collaborative writing tasks could encourage students’ participation and create more learning opportunities (Storch, 2017).

The following questions guide the present inquiry:

1. What are the perceptions of two high proficiency Chinese EFL students toward proficiency pairing?
2. What factors may contribute to their perceptions of different proficiency pairing methods?
3. In what ways, if any, do their perceptions of proficiency pairing affect their actions in the collaborative writing process?

Method

Research Context and Participants

The study was conducted in a reading and writing course offered to 38 students (28 females and 10 males) at a research university in the northeast of China. With their ages ranging from 19 to 20, the students had learned English for 9.35 years in average (SD=1.39). The course lasted 16 weeks and students met 2 hours a week. Students were assigned two argumentative essays to be completed in pairs during class time over the course of the term. As collaborative writing assessment should involve both the final product and the writing process (Storch, 2013), students were informed that they would be assigned a grade as a pair (Johnson & Johnson, 2009) to promote a sense of accountability for their joint effort (Johnson & Johnson, 2009). Also, students were informed that they would receive an additional individual grade based on their partners’ assessments of their contributions to the writing process. The researcher, the first author of this paper, was the course instructor. While teaching reformations have been implemented in the university level in the past years, the teaching and learning of English in Chinese universities are still examination-oriented (Chen & Yu, 2019). This is primarily because students need to pass College English Test Band 4 (CET-4) (a standardized national college English test for non-English-Majors) to meet the required English levels to get their degrees. All the students were labeled as HP or LP based on CTT-4, their placement test scores, in-class writing quiz scores, and the instructor’s general observation.

Students were required to choose different partners for the two assignments, and they were encouraged to choose partners with whom they were less familiar in order to avoid off-task talking (Mozaffari, 2017). These students were relatively equal in terms of income, social status, and physical differences as they were from the same major and same year of the study. Two students from different pairs, Mei and Yue (pseudonyms), were selected for analysis in this study as a result of purposive sampling (Yin, 2009). Both Mei (age 19) and Yue (age 20) were second-year female students studying Chinese literature. They
were selected for several reasons. First, they were identified as high proficiency students based on their placement test scores, in-class writing quiz scores, and the instructor’s general observation. Additionally, both had collaborated with a partner of similar proficiency level (high proficiency) for one task and with a partner of different proficiency level (low proficiency) for another task. Finally, they held different views on preferable partners in terms of language proficiency. Mei strongly expressed her willingness to collaborate with a high proficiency partner. Yue, on the other hand, held a neutral point of view on the language proficiency of her partner.

Research Procedure

In the first week, all students in the class (n=38) were surveyed for their biographical information, including age, gender, years of English learning, etc. Also, a 2-hour pre-task training provided students with knowledge of collaborative writing, such as its definition, benefits and concerns, writing techniques, and models of collaborative writing processes (Chen & Happood, 2021). During week 4 of the class, students were given 80 minutes to write a 120 to 180-word, teacher-selected argumentative essay in self-selected pairs. The writing process was audio-recorded for each pair. Each student was also required to write a reflective journal about the activity outside of class. Additionally, each student was provided a peer assessment sheet for a summative grading based on a 4-point scale (see Appendix) that prompted them to explain what their partner did in completing the assignment. In week 8, students were asked to write the second argumentative essay in class (with a different partner) and compose a guided reflective journal outside of class. Students are familiar with writing reflective diaries from previous classes. All the journals were kept in a sealed envelope until after the term had ended and students had received their grades from their instructor. In weeks 9 and 10, post-task, in-depth interviews were conducted with Mei and Yue (30–40 minutes each). Questions were related to their perceptions of their partners’ language proficiencies, their preference of partners, and their behaviors in writing with different partners. Interviews (15–20 minutes each) were also conducted with the students who had partnered with Mei and Yue for the two essay assignments—a total of four interviews with four partners—in order to evaluate and confirm some of Mei and Yue’s behaviors during the writing process. Each interview was audio-recorded. Table 1 gives an overview of the timeframe and the key events of the data collection.

Data Sources and Analysis

Multiple sources of data were collected, including interviews, audio-recordings of pair talk, drafts of collaboratively-drafted essays, and reflective journals. The interviews and recordings of pair talk were originally in Chinese and were transcribed by a graduate student and verified by the researcher. All data were analyzed according to Yin’s (2009) real-life case study methodology and conventions of qualitative data analysis (Miles & Huberman, 1994). The researcher, the first author of this paper, looked through the data to develop a general understanding of the writing process and the two students’ perceptions of the writing activity. The researcher then looked at the data again and identified various codes related to participants’ perceptions of proficiency pairing and their behaviors while working with different partners. To answer the first research question, the researcher organized the codes relating to students’ perceptions of proficiency pairing; next, codes were categorized into themes that summarized the factors that had influenced participants’ preferences for different proficiency pairing methods. For example, the theme “collaborative writing assessment” was identified as a relevant factor by combining the categories of “contributions in writing process” and “grades of the writing products.” To answer the second research question, the researcher identified different codes relating to how the two students coped with difficulties and resolved problems in content, organization, grammar, vocabulary, and mechanics. For example, an instance in which Yue attempted several times to choose a better vocabulary word was coded as “seek for further solution in vocabulary.” The identified codes were further analyzed with reference to the two students’ perceptions of proficiency pairing. For example, it was found that Yue was more motivated to seek multiple solutions when working with a fellow high proficiency learner. This was coded “seek for further solution in vocabulary—with high proficiency learners.” After the themes were identified for two research questions, the researcher then used Yin’s (2009) cross-case synthesis to compare the similarities and differences among the themes and reach final conclusions. To ensure reliability, a graduate student and the researcher independently coded the data and resolved disagreements through discussion. Cohen’s Kappa for the initial coding was .92, indicating high inter-rater reliability. Discrepancies were resolved through discussion.

Results

In this section, I report the findings from the two cases of Mei and Yue. I first report the students’ perceptions of
proficiency pairing. I then analyze the factors that shaped their preferences. Lastly, I presented how perceptions of proficiency pairing affected students’ actions in collaborative writing.

Mei: “Alone We Are Strong, Together We Are Stronger!”

Perceptions of proficiency pairing. Data from post-task interviews and reflective journals revealed that Mei perceived similar and mixed proficiency pairing methods very differently. She preferred writing with the stronger partner and described her collaborative writing experience with Jiao (HP: a partner with similar high language proficiency) as “unbeatable teamwork.” She explained: “I enjoyed our teamwork. It turned out very successful. We can always point out mistakes in our essay and revised multiple times. I think our final draft is error free and full of great ideas” (Reflective Journal 1). Jiao, who was Mei’s partner, also confirmed that “our writing process was very smooth” (Post-task Interview).

By contrast, Mei did not consider her writing experience with Lei (LP: a partner with lower language proficiency) to be beneficial. She felt the writing process was “not that much fun” (Post-task Interview). She explained: “I had to be very focused while writing with Lei, because I don’t rely on him much. On the top of that, I needed to explain grammar and sentence structures when he had questions” (Post-task Interview). Since Mei had to play the role of both writer and teacher when working with Lei, she found collaborating with her low proficiency partner less rewarding.

Factors that contributed to her preference. Several factors were found to have influenced Mei’s partner preference. First, working with a high proficiency partner seemed to positively impact Mei’s levels of motivation when it came to writing collaboratively. The audio recordings revealed that Mei was a more motivated writer with the stronger partner, but an unmotivated writer with the weaker partner. She explained her struggle in the post-task interview.

I was motivated to perfect our essay. I learned a lot from Jiao (LP). I am very proud of our work. However, I had a hard time being motivated when working with Lei (HP). I keep telling myself we should work together. It was a team assignment. But, I kind of lost interest when I contributed a lot for our essay. (Mei, Post-task Interview)

As we can see, Mei’s change in motivation between the two partners can explain why she perceived the two collaborative writing assignments differently and why she preferred collaborating with a high proficiency partner.

Data also showed that Mei’s perceptions of different proficiency pairing methods were driven by her perceived self-value in the writing process. Specifically, Mei considered herself as a “teammate” while working with Jiao (HP), whereas she perceived herself as a “help” when writing with Lei (LP). This was explicitly explained by Mei. She stated, “I feel much happier to write as a team. It’s very different than being a helper” (Reflective Journal 2). This variation in Mei’s self-value was also evident in the interview. For example, she said:

It seems more fair to both receive and give help. I get feedback for my ideas and get help for revising it. Then I can feel like we are achieving the goal together. We are doing a team project. It is an encouraging experience. If I always have to help and push my partner to create ideas, I would feel exhausted. (Mei, Post-task Interview)

Mei’s explanation of her perceived role in the writing process (whether a helper or a teammate) demonstrated how self-value played an important role in her partner preference.

Apart from motivation and perceived self-value, the methods used to assess the collaborative writing assignment also influenced Mei’s perceptions. Since grading involved both a pair and individual grade, Mei was worried about pair grade. She expressed that, in her view, assigning the same grade for the final writing was unfair for the person who contributed the most. Mei admitted:

My partner’s effort would affect my grade, because we share the same grade. It is not fair when I write with someone who is not competent. Lei (LP) did not seem to be able to write sentences with clear structure and accurate grammar. I rewrote many sentences. Should I get more credit for doing more work? (Mei, Reflective Journal 2)

Additionally, given that individual grades were based on peer-assessment, Mei worried whether or not Lei (LP) adequately appreciated her help and would objectively acknowledge her contribution. On the other hand, she did not give much consideration to evaluating Lei because she was more concerned with Lei’s assessment of her. She said,

In terms of peer assessment, I am more worried about if my partner gives me an honest score. Especially for the first essay with Lei (LP), would he appreciate what I did? I am not sure. What if he did not agree with me or unsatisfied with my revisions? I worry about it. (Mei, Post-task Interview)

The analysis of above data revealed that Mei’s concerns about collaborative writing assessment, including elements from both the writing product and process, resulted in her preference for writing with a strong partner.

Perceptions of proficiency pairing that affected her actions in collaborative writing. Mei’s perceptions of proficiency pairing primarily impacted her writing practices in two ways. First, the components of writing that she focused on with Jiao (HP) and Lei (LP) differed. She focused more on language form, particularly grammatical errors, when writing with Lei (LP). She explained:
I was very picky on those language errors. We had limited time, so we had to focus on the basic things and obvious mistakes first. I think language is more urgent than beautiful ideas at this point. It would look very bad if we had grammatical errors a lot. (Mei, Post-task Interview)

Her focus on grammar was also confirmed by Lei (LP) in the post-task interview when he acknowledged that “Mei always helped me write grammatically correct sentence and explained many grammar points to me” (Lei, Post-task Interview). Excerpt 1 below is an example of how Mei encouraged Lei (LP) to check for errors repeatedly in the revising stage.

Excerpt 1:
Lei: The second paragraph looks all good.
Mei: We have to be very careful. Let’s read it one more time.
Lei: OK.
Mei: Here. Should be ‘was’. Past tense.
Lei: Yes. Right.
Mei: Alright. Let’s check the tense and spelling all over again.

Interestingly, Mei tended to focus on both global errors (language form, content, and structure) and language form while collaborating with Jiao (HP). In her view, the focus of her writing had shifted. She said:

We don’t need to spend too much energy on small things. Jiao and I are equally good at grammar. Both of us are very confident and believe our writing is good. Then, it left us more time to organize ideas, perfect the paragraph structure. We made sure our ideas are new and interesting. (Mei, Post-task Interview)

Jiao (HP) agreed with this characterization as she noted that “Mei’s assistance was very comprehensive and she is a thoughtful person” (Jiao, Post-task Interview). Excerpt 2 below describes how Mei and Jiao (HP) comprehensively and holistically revised the essay.

Excerpt 2:
Jiao: I read it through. I did not find any mistakes.
Mei: I think we are good on language use. Do you want to see if our ideas are clear enough?
Jiao: Oh, yes. That is important. We should check and see if our thesis statement is clear.
Mei: Absolutely!

Mei’s perceptions of proficiency pairing also affected her writing practices when she and her partners faced difficulties during the writing process. Mei was more conservative dealing with difficulties when writing with Lei (LP), whereas she was inclined to challenge herself to seek the best possible solutions when writing with Jiao (HP). Specifically, Mei was less ambitious when she encountered difficulties with Lei. She tended to lower her expectations for what they could accomplish in their essay. For example, she said:

When you work with whatever you have, you cannot have high expectation. Simple answer may not be the best solution all the time, but at least it makes fewer mistakes. Right? I pay most attention to two points. 1: Stay on the topic. 2: No major mistakes. That all I can care. (Mei, Post-task Interview)

Excerpt 3 provides an example as to how Mei and Jiao (HP) followed the two principles when facing the difficult language points.

Excerpt 3:
Lei: This sentence does not look right. It is long.
Mei: I am not sure. Let’s break it down into two short sentences.
Lei: Maybe it is right.
Mei: It is safe to put into two simple sentences. More clear.

In contrast, Mei was more ambitious in the way she faced difficulties with Jiao (HP). In the “unbeatable team,” she had faith that they “should clear out all mistakes and explore beyond the limits” (Mei, Reflective Journal 2). Mei’s ambitious behavior was also recognized by Jiao (HP). She described “Mei was excited to take further steps to have the best answers possible” (Jiao, Post-task Interview). Excerpt 4 describes how Mei and Jiao (HP) challenged themselves in revising the essay.

Excerpt 4:
Mei: We used the word ‘goal’ many times. Do you want to change a word?
Jiao: Yes, how about ‘purpose’?
Mei: It is a good one. It would be better if we chose a similar word from CET4 word bank. Let’s look it up.
Jiao: Um...intention?
Mei: That is the best choice!

Yue: “I Can be a Good Player in all Games”

Perceptions of proficiency pairing. Yue held a neutral point of view concerning her preference for similar or mixed proficiency pairing. She treated collaborative writing activities
as “games.” In her opinion, “a good player should play multiple roles in different games (collaborative writing activities) with different teammates” (Reflective Journal 2). She explained:

I don’t really care who I am working with. Xue (HP) and I worked perfectly together. We can make up each other’s shortcomings. However, I wouldn’t say working with Bing (LP) was unsuccessful because helping him is fun. It is like a game. Xue has better equipment. Bing didn’t have. What I should focus on is to win the game. (Mei, Post-task Interview)

While Yue enjoyed working with both Xue (HP) and Bing (LP) and played multiple roles (i.e., an equal contributor or a teacher) when collaborating with different classmates, she admitted she would work with a classmate of higher language proficiency if she could choose. Her reason was primarily about “saving much time and energy” (Post-task Interview).

Factors that contributed to her preference. Similar to the case of Mei, multiple factors were found to account for Yue’s perceptions of proficiency pairing. First, Yue’s motivation in collaborative writing led to her neutral point of view on different proficiency pairing. She was equally motivated when collaborating with the two partners because she believed each person had merits that she could learn from. She stated:

I am willing to work with everyone, because every student has strengths. Xue is good at English writing. I learned some writing skills from her. Bing (LP) may not be confident about his English writing, but he offered some great points of view. I think he is a very creative person, and very positive too. I learned different knowledge from different partners. (Yue, Post-task Interview)

Thus, Yue’s positive belief in the possibility of learning from everyone may have motivated her and, therefore, she did not have a particular preference concerning similar or mixed proficiency pairing.

Second, the data revealed Yue’s perceived self-value in the writing process may have affected her perceptions of proficiency pairing. Specifically, Yue perceived herself as both a feedback receiver and a feedback provider. She mentioned:

I play two roles. I learn from my classmates, and I watch and help my classmates to learn. I think it is selfish to only think about getting things (help or knowledge) from others. Assisting my partner to learn is another very important aspect in pair work. We earn mutual respect and we grow our partnership. I got fulfilled when I can make others to learn. (Yue, Post-task Interview; Reflective Journal 1)

As we can see, Xue’s dual self-value—as a learner and someone who helped others learn—may have influenced her perceptions of proficiency pairing.

The last factor that impacted Xue’s perceptions of proficiency pairing was how collaborative writing was assessed. While Xue expressed her concerns that working with a low proficiency partner might make it more difficult to get a high score, she believed peer assessment would accurately reflect her effort in doing the best job she could. She greatly favored peer assessment as the mediator for fair grades. She said:

My partner and I had to write on the peer assessment sheet about what we did, how much effort and time we put into the final draft. Thus, I cannot being too lazy. Also, peer assessment helped the grading seem fair. The teacher will give me more credits for being a good partner. It is like you get paid how much you did. (Xue, Post-task Interview)

Perceptions of proficiency pairing that affected her actions in collaborative writing. Yue’s neutral perceptions of proficiency pairing resulted in her use of similar collaborative writing practices with both Xue (HP) and Bing (LP). She treated Xue and Bing the same manner and attempted to focus on both global and form-focused errors while collaborating with both partners. She said:

I don’t see any different strategies I used when working with different partners. The goal is to win the game (complete the writing task). So, we should not let go any mistakes and chances to improve the quality of our writing. No matter who my partner was, we used checklist (a list of possible errors for both global and form-focused errors) the teacher gave us to check everything. (Yue, Post-task Interview)

Yue’s consistency was echoed by Xue and Bing. Xue (HP) confirmed that “Yue and I used the checklist and read the essay multiple times to avoid mistakes” (Xue, Post-task Interview). Bing (LP) likewise mentioned that the pair used the checklist during the revision process. Excerpts 5 and 6 below provide examples of how Yue treated her two partners with the same strategies during revision.

Excerpt 5:

Yue: Our essay looks great now. Do you want to check everything one last time?
Xue: Absolutely. Let’s see.

Yue: We go over grammar, spelling, essay structure one after another
Xue: Good idea.

Excerpt 6:

Yue: Now let’s revise this essay. Let’s start from checking the essay structure as the teacher taught us.

Bing: Ok. What’s next?
Yue: Then we will check grammatical mistakes, spelling, mechanics. But no hurries. Let’s take a look at the structure first.

Bing: Ok.

While Yue’s neutral perceptions of proficiency pairing did not affect her strategy use in the collaborative writing process, she confessed that she needed to invest more energy while working with Bing (LP). She explained:

I surely spent more time and energy with Bing (LP) because oftentimes I needed to help Bing understand some grammar points. When both of us had no idea about a knowledge point, we needed to look it up or ask the teacher for help. It takes time. Sometimes, we argue about the differences and we don’t know the answer. It is disappointing (Yue, Post-task Interview)

Excerpt 7 below describes how Yue made several attempts to solve a language problem with Bing.

Excerpt 7:

Yue: ‘thoughts?’

Lei: ‘thinking?’ Let’s look it up. Um.. We can say ‘improve our thinking skills’. Is this what we want to express?

Bing: ‘thoughts?’

Lei: Yes. See it (the website) says thinking skills include critical thinking skills and creative thinking skills.

Overall, the examination of the data revealed that although working with less proficient students was time consuming, Yue’s writing strategies remained consistent.

**Discussion and Conclusion**

Equity theory (Adams, 1965; Romer, 1977; Samuel, 1978) states that students with different English proficiencies may compare their costs and rewards in the writing process. Informed by equity theory, this study investigated two HP students' perceptions of proficiency pairing, factors that may have contributed to their perceptions, and the ways their perceptions of proficiency pairing affected their actions in the collaborative writing process.

This study extends earlier research (e.g., Lesser, 2004; Mozaffari, 2017; Storch & Aldosari, 2012) that examined how pairing methods (e.g., similar vs. different proficiency pairing; teacher-selected vs. self-selected pairing) affect the collaborative writing process by considering students’ perceptions of proficiency pairing. Specifically, the case of Mei’s collaborations illustrated that an equitable versus imbalanced relationship between inputs (e.g., efforts, skills, and responsibility) and outcomes (e.g., assistance from the partner, higher grade) may have affected her partner preference. In comparison to writing with an LP partner, Mei was more confident and appreciative working with an HP partner. Thus, differences in Mei’s perceptions of LP and HP partners resulted in her different levels of participation and use of different writing practices during the two collaborations. Such a finding deepens our understanding about the effect of proficiency pairing on the collaborative writing process and highlights the important role that students’ perceptions of proficiency pairing play.

However, it should also be noted that although Yue experienced inequitable contributions from her LP partner (outcomes < inputs; Samuel, 1978, p. 135), she still held a neutral point of view on proficiency pairing. Furthermore, she did not change her collaborative writing practices while working with different partners. This is explained by Yue’s belief that she can benefit from playing multiple roles (i.e., an equal contributor or a teacher). This confirms previous research that students’ positive attitudes toward an activity positively impact their participation (Chen & Hapgood, 2021; Storch, 2001; 2004) and sheds new light on the ways in which role-taking can impact EFL students’ participation and learning during collaborative writing. While prior studies (e.g., Li & Kim, 2016; Yang, 2014) emphasized that adopting a leadership role can influence group interaction, the findings of this study suggested that a flexible role-taking strategy could be a mediating factor for active participation in collaborative writing. For instance, Yue chose to act as a teacher while working with Bing (LP partner), whereas she acted more like an equal contributor while writing with Xue (similar HP partner). By enthusiastically adopting both roles, Yue was able to negotiate the interpersonal dynamics and actively participate in two different collaborative writing activities.

Previous studies (e.g., Chen & Hapgood, 2021; Dobao, 2012; Storch, 2002; 2004) on collaborative writing have not paid much attention to how this activity is assessed. Because some scholars (e.g., Storch, 2013) have proposed that short, face-to-face collaborative writing tasks do not necessarily need to be assessed, it seems that the value of assessment is still debatable in this context. Another aspect of the discussion is related to whether to assign a pair/group grade or individual grade based on individual contributions. The findings of this study suggested it is beneficial to assess collaborative writing holistically by assigning each pair or group a grade and assigning each contributor a grade based on peer assessments. As shown in the case of Yue, peer assessment helped create a positive learning experience by rewarding Yue for her efforts and active participation. For this reason, Yue might have seen her experience with her LP partner more positively and considered this assessment system fairer than a single pair grade. Storch (2013) has argued that it may be necessary to reward both the process (e.g.,
how individuals engage or contribute with each other) and product (e.g., linguistic quality of the text produced) given that collaborative writing process is a co-authoring experience during which members share efforts and contributions. Also, providing learners training or practice for computer mediated collaborative writing tasks, was found to be an effective way to promote collaborative interaction (Arnold et al., 2009). Therefore, the findings of this study are important because they examine the notion of collaborative assessment practice in face-to-face contexts and shed light on the practical implementation of collaborative writing assessment in EFL or L2 classrooms.

Additionally, this study furthers prior research indicating that individuals’ motivation, among other affective factors (e.g., emotion, attitude, and personality), can affect students’ participation in collaborative writing. Thus, the findings not only lend support to Storch’s (2005) emphasis on the role of attitude in affecting patterns of interaction and language learning opportunities; the also provide evidence that a positive attitude can increase motivation, which helps learners accomplish their goals during the collaborative writing process (Dörnyei, 2000). For instance, Yue held a positive attitude toward the activity and believed each partner had merits that she could learn from. Consequently, she was motivated to work with partners of different proficiency levels.

The findings offer practical insights for implementation of collaborative writing in EFL or L2 classrooms. First, this study indicates that L2 writing instructors should take equity or fairness into consideration while implementing collaborative writing. In other words, because students may have different preferences for pairing methods, and this could affect how they behave during the activity, instructors will benefit from taking a student-centered approach as they implement collaborative writing. Also, when collaborative writing is used in L2 writing classes, teachers may need to provide students with more opportunities to work with a variety of partners. In this way, students may gradually develop a sense of their own collaborative styles as they consider their relative successes and difficulties in different types of pairings. Second, while this study suggested collaborative writing assessment as a feasible pedagogical tool to promote active participation and fairer grading, it ought to be noted that writing teachers should propose grading themes that attempt to assess not only the final product but also the learners’ contributions to the collaborative writing activity. The peer assessment sheet used in this study could be an example.

Despite the implications of this study, several limitations are discussed in order. First, although the in-depth interviews and reflective journals enabled the researcher to track learners’ perceptions of different proficiency pairings and behavioral change, more sources of data, such as class observation notes and stimulated recall interviews, could have been collected to help triangulate the data more holistically. Third, case study data was to be limited to 2 renderings. The findings would be more impactful if more cases were presented and discussed. Forth, while the peer assessment was competed individually, students may inflate the worth of their peer’s efforts to maintain the social connection. Future research may combine teacher assessment with peer assessment to maintain a better reliability.

In conclusion, this study revisited proficiency pairing in light of equity theory (Adams, 1965), examining two high proficiency Chinese EFL learners’ perceptions of proficiency pairing and how their perceptions affected their actions in the collaborative writing process. In the face of growing interest in writing and learning collaboratively in L2 higher education, it is important for educational researchers and teachers to rethink the role of proficiency pairing from the learner’s perspective. While this study has analyzed learners’ perceptions of proficiency pairing, future research on this topic could adopt a mixed methods approach comparing learners’ perceptions of proficiency pairing with proficiency groupings of three in order to examine how different pairing methods influence collaborative writing processes and products.

**Appendix**

**Collaborative Writing Peer Assessment Form**

Below are seven categories that you need to use to assess your peers and your pair work. For each item, rate your peer using the 4-point scale given. Please think hard and honestly about each of the categories and how you and your peer performed. Beside each rating item, please include examples or explanations that will help the teacher understand your ratings, and your individual or peer’s strengths and contributions. Please do your assessments independently.

**Scoring** For each category, award yourself or your peer a score using this scale.

- 3—Better than me in this respect
- 2—About average for the team in this respect
- 1—Helped not as much as me in this respect
- 0—No help at all to the team in this respect

**Below are seven categories that you need to use to assess your peers and your pair work.**

### Part A: Product Evaluation

1. Helped you to pay more attention to quality of the text produced
2. Helped you in improving your linguistic skills
3. Helped you in checking spelling and grammar
4. Helped you in polishing your text
5. Helped you in finding appropriate words
6. Helped you in finding appropriate expressions
7. Helped you in improving your text on the whole

### Part B: Interaction Evaluation

1. Helped you to make more effective and useful comments
2. Helped you to actively participate in the activity
3. Helped you to learn to cooperate with others
4. Helped you to show your ideas to others
5. Helped you to manage your time effectively
6. Helped you to collaborate with others
7. Helped you to develop your communicative skills

### Observation Form

| Category | Rating | Examples or Explanations |
|----------|--------|--------------------------|
| Product Evaluation | 1—Helped not as much as me | Helped me by checking my spelling and grammar, but did not offer much in terms of improving my linguistic skills. |
|     | 2—About average for the team | Made some useful comments, but did not provide much feedback on content. |
|     | 3—Better than me | Provided detailed feedback on my work, which helped me improve my text. |
|     | 4—Better than both me and my peer | Offered constructive feedback and helped me identify areas for improvement. |

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ORCID iD

Chen Wenting  https://orcid.org/0000-0002-0706-8716

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