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Peer review in an EFL classroom: Impact on the improvement of student writing abilities

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The benefits of peer review have been found in several studies (see, for example, Min, 2005; Tsui & Ng, 2000). However, little research has examined whether peer reviewing actually contributes to student writing performance (Kurihara, 2014; Lundstrom & Baker, 2009), especially at the high school level. The current study investigates the effects of peer reviewing on the development of writing abilities of high school EFL students in Japan. The participants engaged in peer reviewing over a 12-week period, and pre-and post-essay tests were conducted to determine whether it had a positive effect on their writing performance. Students' attitudes to peer reviewing were also investigated through questionnaires and interviews conducted after the post-test. The findings indicate that students' attitudes toward peer review influenced their revision process and thus had a major impact on the development of their writing. Regardless of their English achievement levels, students who trusted the validity of peer comments showed improvement in their writing performance and those with little trust showed no significant improvement.

Key Words: peer review; writing; English as a Foreign Language; classroom research; Japan

Introduction

The issue of peer review has received great attention in the literature on English as a Second Language (ESL) and English as a Foreign Language (EFL) since the introduction of collaborative learning in the context of English as a First Language (L1). Numerous studies have found that peer feedback can benefit students in ESL/EFL writing classes. For example, student cognitive, meta-cognitive, and social strategies were facilitated through interactions between peers during the writing process (Min, 2005, 2006; Villamil & de Guerrero, 1996, 2006), and led to improvements in the writing quality of revisions (Kamimura, 2006; Min, 2006). Furthermore, peer feedback has been found to contribute to the development of autonomous leaning by encouraging student control over their own writing (Tsui & Ng, 2000; Yang, Badger, & Yu, 2006). However, despite research findings that claim benefits from peer review, there is little empirical evidence that peer review has an effect on improving student writing abilities (Lundstrom & Baker, 2009).There is a particular dearth of research on this question at the secondary education level (Kurihara, 2014; Sengupta, 1998).This study examines the extent to which peer review contributes to the development of student writing performance in an EFL high school class.

Literature review

English writing pedagogy has focused on collaboration in learning since Vygotsky (1978) advocated "the zone of proximal development" (p. 86), which signifies the interaction and cooperation with adults or more capable peers in child intellectual development. In L1 English settings, for example, Bruffee (1984) regards writing as a "social artifact" and attached importance to mutual support between peers in writing. Nystrand (1989) opines that peer collaboration raises the writer's awareness of their own writing processes. Thus process-oriented writing, where writers are provided with feedback from both the teacher and peers along with opportunities to revise, became a predominant approach (Andrade & Evans, 2013). The focus of collaborative learning in L1 settings has also influenced writing instruction in L2 English contexts. Andrade and Evans (2013) point out, "L1 writing practices have been highly influential in L2 pedagogy, … nothing has been more influential than the process approach" (p. 2). Thus, L2 educators have adopted a process-oriented approach, and both teacher and peer feedback has been extensively investigated in the L2 context.

Research on teacher feedback in the L2 context found that teachers tend to focus on grammar and mechanics in their feedback and that ESL/EFL students regard error correction as having great value and importance (Hedgcock & Lefkowitz, 1992; Hyland, 1998; Lee, 2008; Leki, 1990). Researchers contend that error correction should not be excluded from teacher feedback since it is vital for teachers to consider students' expectations and perceptions toward teacher response in the specific teaching context.

Studies which investigated the impact of teacher and peer feedback found that the incorporation of peer feedback into student revision processes seemed to be small compared to that of teacher feedback.Connor and Asenavage (1994) found that 5% of peer feedback was incorporated compared with 35% of teacher feedback and 60% of feedback from other sources such as tutors in the writing centre. Yang et al. (2006) found that the adoption of teacher feedback in student revision was twice that of peer feedback. These studies indicate that peer feedback often has a smaller impact on writing revisions than feedback from other sources. Research into student attitude has also found that ESL/EFL students prefer teacher feedback to peer feedback. For example, Leki (1990) found that ESL students have difficulty trusting the suggestions of their peers. Zhang (1995) reports that the majority of his ESL students preferred teacher feedback to peer or self-feedback, stemming from student distrust of peer feedback due to the limited linguistic abilities of L2 students. Tsui and Ng (2000) also found that their secondary school students preferred teacher feedback over peer feedback. Thus, ESL/EFL students seem to regard peer feedback as being less important than teacher feedback.

Despite the smaller impact of peer feedback, benefits have been found. For example, Mendonça and Johnson (1994) found that peer review fostered student idea generation through communication in an advanced ESL classroom. Min (2005) concludes that peer review provided her college EFL students with scaffolding, and also helped them self-monitor their writing. Villamil and de Guerrero (2006) found that peer feedback fosters self-initiation in the cognitive process in college ESL classes. Yang et al. (2006) found that peer feedback leads to far more self-corrections than teacher feedback. Tsui and Ng (2000) found that students recognizes that peer feedback has distinct roles, such as "enhancing a sense of audience, raising awareness of their strengths and weaknesses in writing, encouraging collaborative learning, and fostering an ownership of text" in the secondary L2 context (p. 168).

Studies that examine the effect of peer feedback on student writing performance in revising have obtained somewhat contradictory results. For example, Kamimura (2006)

investigated the impact of peer review on the revisions of two different proficiency groups and found that both groups improved the quality of their writing; Min (2006) found that peer feedback led to the improvement of revision quality; and Sengupta (1998), in investigating the text improvement of high school student writing after receiving peer feedback, found no major improvements in the revised texts. Thus, the effect of peer feedback on the quality of text revision, that is, the decisions a writer makes about which type of feedback to base their revisions on, has been extensively studied, but little research has been done regarding the impact of peer review on a student's ability to produce a new text about a different topic.

Lundstrom and Baker (2009) conducted a study on the effects of peer review on writing ability at the tertiary level. They divided students into a feedback receiver group and a feedback provider group. The feedback receiver group were trained to revise an essay based on peer feedback but did not have an opportunity to give feedback, while the feedback provider group were trained to give feedback but did not receive feedback. Both groups received their training four times during one semester, and pre- and post-tests were conducted. In the post-test, the feedback provider group showed significantly greater improvement than the feedback receiver group. Notably, the lower proficiency feedback providers improved significantly more than the feedback receivers at the same proficiency level in global aspects of writing such as organization, development, and cohesion. Lundstrom and Baker (2009) concluded that the act of peer reviewing had more effect on the writing abilities of the students than the act of review receiving.

Kurihara (2014) investigated the effect of peer feedback on high school student writing performance over a one-year period. In this study, ample time was spent on peer feedback training and peer review was practiced repeatedly between the pre- and post-tests. The results indicate a significant difference between the pre- and post-tests, as well as between the control group and the experimental group. Although students received both peer and teacher feedback, the greater impact seems to have been made by peer feedback. Kurihara (2014) suggests that the incorporation of peer feedback seems to have influenced student learning attitudes resulting in improvement in both writing quality and quantity. However, the study did not examine either the specific areas of improvement that peer review might contribute to, or the influence of student attitude toward peer review and writing improvement. The present study attempts to build on previous work (Kurihara, 2014; Lundstrom & Baker, 2009) by aiming to answer the following questions:

1. Does peer review affect student writing abilities?
2. If so, what aspects of writing does peer review affect?
3. Is there a relationship between student attitude toward peer review and improvement in student writing performance?

Methods

In this study, "writing process" means "the act of writing" (Susser, 1994, p. 34) that involves thinking, discovering, and revising, as well as intervention by teachers and peers, while "writing ability" refers to the skill set to be learned from the act of writing. In particular, writing ability is defined as the aptitude to write a short essay in a limited time without using a dictionary, because this is the skill that high school students need to acquire in preparation for successfully passing college entrance exams. Performance is measured with two different scoring systems: a holistic system and an analytical system which is based on seven aspects (Weir, 1990). The use of this analytical

measurement allows the examination of the area of improvement that correlates with peer review. In this study, "writing performance" is regarded as the outcome of writing ability.

Participants and their background
The participants in this study were a class of 25 17 to 18 year old students (8 males and 17 females) in their last year of secondary education at a strongly exam-oriented academic high school in Japan. The school was ranked second highest in its regional division and its students are generally motivated to improve their English abilities. These participants were selected because they had chosen English as an elective subject, which allowed more flexible class management. Moreover, they all belonged to a special class called *Information Course* and they had been in the same class for two years when this study was conducted. The researcher was also the class teacher. All students in the class agreed to participate in the experiment. As in the majority of Japanese senior high schools, these students had had little experience with essay writing in English before the study.

Research design
Pre- and post-essay tests were administered before and after a 12-week student writing project. In addition, the teacher-researcher's class observations were maintained in a journal and questionnaires and interviews were conducted at the end of the project. This project included two cycles of writing (Figure 1). The subject of the pre-essay test was, "Write your ideas about the following statement: 'It is better to marry later rather than early.' Please provide several reasons." In the post-essay test, the question was, "If your university is a two-hour train ride from your house, would you make the commute or move to an apartment near the university and live alone? Please provide several reasons." Both topics were included in past college entrance exams and were regarded as equally difficult. In accordance with the nationwide standardized test, both the pre- and post-essay tests were conducted for 20 minutes and the students were asked to write a 100-word essay without using a dictionary. Both holistic and analytical measurements were used to examine improvements in the quality of the writing and to discern any specific aspects of improvement. To assess the writing quality improvement, two native English-speaking teachers scored the tests holistically. A score of six indicated the best performance and zero represented an irrelevant test response or no writing. To examine the aspects of student writing improvement, two native English-speaking teachers, who were different from the previous scorers, assessed the same essays based on seven characteristics: relevance and adequacy of content, compositional organization, cohesion, vocabulary, grammar, punctuation, and spelling (Weir, 1990). In this assessment, a score of three indicated the best performance and zero represented the worst results in each area. This analytical measurement was adopted in consideration of the relatively short length of the essays.

Before beginning the first writing cycle, students were taught how to write a paragraph, since they had had limited opportunities to practice this skill beforehand. In addition, five class periods of 50 minutes were spent on peer feedback training because previous studies suggested that training is necessary for peer feedback to be successful (Berg, 1999; Connor & Asenavage, 1994). This training started with the teacher modelling and explaining how to effectively provide feedback using an essay written by a previous student. The students were then assigned into pairs. They used a peer

feedback sheet that asked about the thesis statement, development, and conclusion of the writing, as well as the writer's overall weaknesses and strengths (Berg, 1999; Kamimura, 2006). During the following two class periods, students practiced giving and receiving peer feedback on previous student essays. They first wrote comments on the peer feedback sheets (Appendix A) and then gave oral feedback to avoid misunderstandings.

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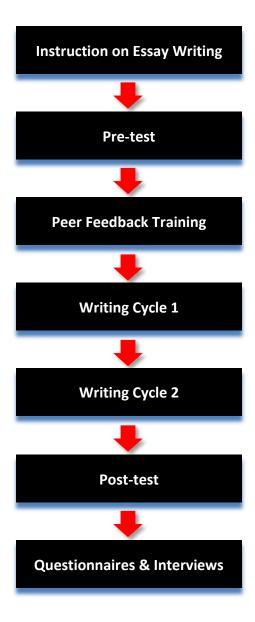
Figure 1. Research procedure

When the writing cycle started, students selected their feedback partners, and then changed them for each session to maximize the number of ideas and comments they encountered. In the second cycle, a simplified feedback sheet was added so that both peer feedback providers and receivers could confirm their understanding of the writing content (Appendix B), because students wrote fairly long essays and seemed to have difficulty reading them in the first cycle. The feedback sessions lasted for 40 minutes and were conducted in Japanese so that the students could communicate easily. Because

teacher instruction is regarded as essential in Japanese secondary education, teacher feedback had to be provided. Therefore, teacher feedback was also given following the second peer feedback session. It consisted of written comments and an individual conference.

Throughout the practice sessions the teacher-researcher recorded observations of the practice sessions in a journal. At the end of the study, questionnaires modelled after Tsui and Ng's study (2000), were conducted in Japanese to examine student perceptions toward peer and teacher feedback. Each student was interviewed individually to obtain a more in-depth understanding of their process of feedback and writing practice (Appendix C). The interviews were audio-recorded and transcribed. Because the interviews were conducted in Japanese, student remarks have been translated into English in the data analysis section.

Results

Essay scores

To standardise the assessment, the scorers checked the first five essays (20%) together, and then individually scored the rest. For the holistic scores, the inter-rater reliability was 100% on the pre-test and 89% on the post-test. Improvement was seen on the post-test and a paired t-test showed significant differences between the pre- and post-tests (Table 1).

Table 1. Results of the pre- and post-tests using the holistic scoring system

N = 25	Pre-test	Post-test	t(24)	p	⊿
M	3.32	3.96	-2.48	0.02	0.57
SD	1.11	1.07	SD		

Note:
⊿ denotes effect size which, following Koizumi and Katagiri (2007), can be characterised as small (between .20 and .49), medium (between .50 and .79) and large (at or above .80

The same tests were assessed using an analytical scoring system to examine the aspects of student improvement after the peer feedback practice. An overall inter-rater reliability of 96% was obtained on both the pre- and post-tests. Since the tests and test items were significantly different, multiple comparisons were conducted (Table 2). Paired t-tests indicated no significant difference in the areas of punctuation and spelling. However, significant improvement was shown regarding relevance, organization, and vocabulary at the .01 level, and in cohesion and grammar at the .05 level.

Table 2. Results of the pre-and post-tests using the analytical scoring system

	Pre-test		Post-test				
	M	SD	M	SD	t (24)	p	⊿
Relevance	1.56	0.63	2.2	0.57	-4.57	0.0001	1.02
Organization	1.76	0.49	2.2	0.58	-3.56	0.001	0.9
Cohesion	1.72	0.45	2.06	0.45	-2.37	0.026	0.64
Vocabulary	1.36	0.66	1.96	0.58	-3.42	0.002	0.92
Grammar	1.2	0.49	1.54	0.49	-2.47	0.02	0.71
Punctuation	2.46	0.58	2.7	0.45	-1.54	0.14	0.41
Spelling	2.76	0.45	2.88	0.33	-0.97	0.34	0.27

Note: ⊿ denotes effect size, small = between .20 and .49, medium = between .50 and .79 and large is at or above .80.

Student perception of the usefulness of teacher and peer feedback

The questionnaire conducted at the end of the project requested respondents to rate (on a six-point scale) their attitude toward different dimensions of feedback: reading peers' writing (giving peer feedback), peer response sessions (peer interaction), reading peers' comments (receiving peer feedback), and reading/listening to teachers' comments. A score of one indicated the least positive attitude while six represented the most positive. Although students generally regarded reading/listening to teacher comments as more useful than receiving peer comments, there seemed to be only a small difference between their rating of teachers' comments and reading peers' writing (Table 3). Unlike Tsui and Ng's study (2000), peer feedback of this dimension appeared to be almost as highly evaluated as teacher feedback.

Table 3. Perceptions of usefulness

				Tsui and Ng's (2000) results	
	M	SD	Cronbach's alpha	M	SD
Reading peers' writing	4.40	1.32	.94	4.04	1.19
Peer response sessions	4.00	1.29	.903	3.63	1.42
Peers' written comments	3.96	1.02	.967	3.78	0.93
Teachers' comments	4.86	1.26	.923	5.53	0.58

In the questionnaire, students were asked about how frequently they implemented teacher and peer feedback. The mean was 5.44 (SD 0.77) for teacher feedback and 4.16 (SD 1.07) for peer feedback, indicating that students incorporated more teacher feedback than peer feedback. In addition, in the interview, 21 students (84%) mentioned that teacher feedback was necessary for corrections regarding grammar and structure. Five students (20%) stated that they needed teacher feedback for word usage advice and

17 (68%) said that it enhanced their organization and ideas. Thus, in terms of accuracy, teacher feedback appeared to be indispensable for student revision.

On the other hand, the majority of students (92%) stated in the interviews that they needed peer feedback in addition to teacher feedback. They stated that peer response sessions not only broadened their ideas but also gave them an opportunity to communicate their ideas in the target language and check if their writing was understood by others. Interestingly, the students who had negative attitudes toward peer feedback were those whose scores did not improve in the post-test.

Peer feedback and improvement of essay scores

Participants' improvement in essay writing was measured by calculating the difference between the pre- and post-tests (Table 4) and this difference was also compared with students' English proficiency levels as represented by their scores on the nation-wide standardized English test (where a score of 50 represents the national average and individual scores are calculated according to the standard deviation). With the exception of four students, all participants showed improvement on the post-test. As is clear from the comparison, there is no relationship between students' English proficiency level and their improved performance on the post-test.

Table 4. Results of the pre- and post-tests ordered according to students' academic achievement levels
(as represented by the national standardised English test)

Student	Pre-test	Post-test	Difference	Up/Down*	Achievement**
1	16	17	1	↑	A
2	11	18.5	7.5	↑	A
3	15	20	5	↑	A
4	15	19	4	↑	A
5	15.5	16.5	1	↑	B
6	14.5	17	2.5	↑	B
7	**15**	**12.5**	**-2.5**	↓	**B**
8	13.5	14.5	1	↑	B
9	12.5	14.5	2	↑	B
0	13.5	14.5	1	↑	C
11	10.5	17	6.5	↑	C
12	10	18.5	8.5	↑	C
13	14	15	1	↑	C
14	12	16.5	4.5	↑	C
15	**15**	**13**	**-2**	↓	**C**
16	13	16	3	↑	C
17	14.5	16.5	2	↑	D
18	14	15	1	↑	D
19	**14**	**13.5**	**-0.5**	↓	**D**

20	**12**	**12.5**	**0.5**	↑	**D**
21	**13**	**13**	**0**	=	**D**
22	8	14	6	↑	D
23	9	15	6	↑	E
24	10	14	4	↑	E
25	10	15	5	↑	E

Notes:
* ↑ denotes increase, ↓ denotes decrease, and = denotes no difference
** Achievement is characterized by scores on a national standardized English test: A ≧ 60 ＞ B ≧ 55 ＞ C ≧ 50 ＞ D ≧ 40 ＞ E.

To investigate the relationship between student attitude and the degree of their improvement, the interview data was examined closely. Interview questions were concerned with their revision process and the extent to which they found peer and teacher feedback useful. Although student attitudes varied, a certain tendency was seen in which the degree of their improvement in writing skills was related to their attitude toward peer review. Accordingly, the students were categorized into three groups: no improvement, moderate improvement, and substantial improvement.

No improvement group

The interview data indicated that those students who were not reliant upon peer feedback showed either no improvement on their essay tests or scored worse (the difference between the two tests ranged between 0 and -2.5 points). During the interview, one student confessed that he neither listened to his peer's comments nor tried to read his peer's writing seriously during the feedback sessions. He explained, "I didn't practice peer feedback seriously because I knew that the teacher would give us feedback anyway. My peer only told me what I already knew." Two students, whose scores also dropped, showed a clear distrust in their peers' and their own ability to give effective feedback. One of them commented, "I have no such ability to evaluate others' writing. I can't take such responsibility. Students have only limited knowledge. Giving feedback is beyond our ability." These students did not seem to trust peer feedback itself.

Another student stated that she ignored her peer's suggestions because she believed in herself more. She also added, "I don't know what to do without the teacher's advice." In the teacher's observation of the peer response sessions, these students appeared to give and receive peer feedback as instructed. Deep inside, however, the students found it difficult to trust their peers' comments.

Moderate improvement group

Students who showed a slight or moderate improvement (between 0.5 and 3 points) had a common tendency to affirm the value of peer feedback. However, they did not incorporate peer suggestions or corrections into their revisions. These students stated that their teacher's error corrections were indispensable and they could not rely upon peer feedback for accuracy. All students in this group stated that peer response sessions and reading peer comments were opportunities to check whether their own writing effectively communicated their ideas. This is consistent with the findings of Tsui and Ng (2000). One student explained, "If the peer misunderstands my message, then it

means that my writing has a defect. So I revise that part." Thus, the students decided how and where to make a change in their revisions, based on whether their writing was understood by their peers.

With regard to giving feedback, the students highly valued reading their peer's writing in that it broadened their view of the world. In addition, many said that they enjoyed understanding another person's ideas in their target language. In other words, the students learned authentic communication through the peer response sessions. Reading their peers' writing also enabled them to reflect on their own writing. According to one student, "When I found my peer's writing awkward in organization, I tried not to make the same mistake, and if I read well-organized writing, I imitated it in my own writing." In this case, the student revised his writing through self-reflection that was triggered by reviewing his peer's writing and this resonates with the findings of Lundstrom and Baker (2009) and Yang et al. (2006).

Thus, the students in this category did not depend on peer feedback for suggestions, but appreciated the authentic communication during the feedback sessions. Rather than incorporating peer comments, they used peer feedback for self-reflection and revised their writing in a more self-regulated way.

Substantial improvement group

Students who showed substantial improvement (>3.0 points) on the essay tests regarded peer feedback as more than a detector of defects in their writing. Similar to other groups, they depended on teacher feedback for grammar, language, and usage accuracy. However, their attitude toward peer feedback was definitely more positive. The students in this group behaved consistently with those of other studies by regarding peer review as an opportunity: to gain new ideas (as occurred also in the research of Mendonça & Johnson, 1994), to detect organizational problems (also found by Min, 2005), and to learn how their writing was interpreted (see Tsui & Ng, 2000), but they also adopted suggestions from their peers.

These students also had a more positive attitude toward reading their peers' writing. They not only appreciated communication through writing during peer review sessions but were motivated to learn through the activity. One student said that she was motivated to read English essays through peer review. Most importantly, these students reported having admiration for their peers' writing. One student stated, "I was impressed because my peer's writing contained such refined expressions and structures. I tried to use those expressions in my writing." Another student commented, "I learned how to organize sentences through my peer's writing." Students in this group not only learned how to self-evaluate their writing critically through peer reviewing but also tried to improve their organization and expressions, imitating their peers' performance. In the process of reviewing they might have received scaffolding from peers. Furthermore, they pointed out the difference between teacher feedback and peer feedback as a learning tool.

Role of peer review

To answer the question, "Do you think teacher feedback is all you need?" all but one student replied, "No." Students seemed to value peer understanding of their writing more than the teacher's. A student with high academic achievement stated, "I think peer feedback sessions are necessary because it's easier to ask my peers than my teacher."

Another student, whose achievement level was low but showed a substantial improvement on the post-essay test, explained:

> I felt at ease during the peer feedback sessions. It was fun because we communicated by means of our own writing. The atmosphere was relaxing. Through peer feedback sessions we got an idea about the level of English writing that our peers understood so that we could adjust to it. We learned about organization and expressions through this activity. In contrast, teacher comments sounded heavy. It was like a textbook.

Thus, peer feedback provided more relaxed opportunities in which students could practice authentic communication in their target language. In contrast, receiving teacher feedback may have differed little from being taught in a teacher-controlled classroom.

Discussion

After the incorporation of peer and teacher feedback in the writing class, most students showed significant improvement in their writing performance. Prior to this experiment, students had no such experience with teacher feedback or peer feedback; therefore, it is likely that this improvement results from this approach. The questionnaire results on student attitudes toward feedback indicate that students regarded teacher feedback as essential to their revision process. However, the data also indicate that giving peer feedback enriched students' own writing as much as the teacher comments. Furthermore, the interview data indicate that reading peer comments facilitated self-reflection about writing, which led students to focus more attention on their revisions(as was also the case in the research of Yang et al., 2006). Thus, the findings suggest that peer review facilitate better student revision processes, resulting in overall writing improvement.

However, not all students improved their writing performance. With regard to the level of improvement, the interview data reveal that student development was related to student attitude toward peer feedback sessions. The categorization of students into three groups further clarifies the relationship between improving writing and students' attitudes toward peer feedback.

Students in the *moderate improvement* group viewed peer feedback as an opportunity to confirm that their writing was understood by others even though they did not incorporate peer advice into their revisions. Through reviewing the writing of others, these students learned to self-evaluate their own writing, which seems to have resulted in an overall improvement in their writing abilities.

The *substantial improvement* group regarded peer feedback as an essential part of their revision process in which they not only learned how to self-evaluate their writing critically after giving feedback, but also improved their organization and expressions based on their peers' performance. In this case, they found role models in their peers. These students valued both giving and receiving peer feedback and learned how to negotiate the meaning between themselves and their audience.

The *no improvement* group mistrusted their peers and peer feedback sessions and were totally dependent on the teacher's feedback during the revision process. Their distrust of peer feedback might have hindered not only evaluating their peers' writing but also their own. Thus, they might have missed an important process of writing. It is noteworthy that these students showed no improvement in writing despite receiving teacher feedback, which they trusted to a great degree.

Thus, it is clear from the data that students' attitude toward peer review plays an important role in the improvement of their writing performance. Most importantly,

students develop their writing performance regardless of their individual academic achievement level.

Conclusion

The study reported here explored the potential of peer feedback in a Japanese high school writing class of students studying English as a second language and found that incorporating peer review in addition to teacher feedback contributes to the improvement of students' ability to write a new text. Participants showed significant improvement in the overall quality of their writing and in relevance, organization and cohesion, vocabulary, and grammar. It was also found that the degree of student improvement in writing performance seems to be related to how much they trust peer feedback. Performance in global areas improved in students who showed more trust in their peers and their feedback, while those with a negative attitude toward peer feedback showed no improvement. It seems that the practice of peer feedback fosters self-reflection and self-correction and increases students' sense of control over their knowledge acquisition. It is noteworthy that the difference in writing improvement in this study seemed to be related to student attitude toward peer feedback although all of the students regarded teacher feedback as indispensable and adopted it more frequently than peer feedback. The study suggests that peers, rather than the teacher, may have more influence on the improvement of writing performance.

Limitations

Due to the small number of participants and short period of time covered in this study, the overall impact of peer and teacher feedback was not fully discernible. In addition, this study was conducted in a class which was elective and where all students had known each other for two years. While these unique conditions made the research feasible, no control group was available. Despite these limitations, the findings of this study are still important. It demonstrates that students benefit from the practice of peer review in Japanese EFL high school classes. It also suggests the possibility that through guidance on peer review and its use, EFL high school students may improve their writing abilities more than by relying solely on their teacher's feedback.

About the author
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Appendix A: Peer Feedback Sheet #1

No.（   ）Name（   ）

1. Thesis Statement:
   Did the writer write a topic sentence? What is the topic sentence?
   Did the writer show his/her stance regarding this topic sentence?

2. Development of paragraphs:
   Did the writer clearly state the evidence that supports his/her topic sentence?
   Please state the writer's evidence.
   Is the evidence explained sufficiently?
   Is there any sentence that is irrelevant to the topic sentence?
   Are the sentences ordered logically?

3. Conclusion:
   Did the writer state a conclusion?
   What is the conclusion?
   Is the conclusion related to the topic sentence?

4. Grammar: Is there any major grammatical issue? If any, please check the problematic part.

5. Strength: Please write at least one thing that you believe is the strength of this writing.

6. Suggestions Please give at least one suggestion that you believe will help improve this writing.

Appendix B: Peer Feedback Sheet #2

Date (/   )

Peer's Name (   )   Feedback Provider's Name (   )

1. Please summarize your peer's writing (in Japanese) according to the following:

Introduction: (topic sentence)
Main Idea
Main Idea
Main Idea

Conclusion:

2. Please summarize the content of your peer's writing as a whole.

3. Please point out what you found interesting (in Japanese).

4. Please suggest aspects that can improve your peer's writing: additions or deletions.

Appendix C: Interview Questions

1. When you revised your writing, were your peer's comments useful?
   If so, how? If not, what was the problem?

2. What sort of peer feedback did you prefer?

3. Was reviewing your peer's writing useful?
   If so, how? If not, what was a problem?

4. Do you believe that receiving only peer feedback is sufficient in the revision process?
   If so, why? If not, why not?

5. Were your teacher's comments useful?
   If so, how? If not, what was the problem?

6. What sort of teacher feedback did you prefer?

7. Do you believe that receiving teacher feedback alone is sufficient in the revision process?
   Why?