The effect of anonymity in peer review

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Peer review is used in English writing classes to raise the standard of students' writing through a co-operative process of evaluation and feedback. It aims to allow students to see their own strengths and weaknesses as reflected through the work of their equal other. However, in the process, students see a double reflection: their own as student, but also a new reflection as teacher and critic. When face-to-face with their peers, students' willingness to provide feedback seems compromised. This paper will investigate whether this reluctance can be ameliorated by making the reflection as teacher and critic less obvious. To do this, students in first year university academic writing classes undertook both face-to-face and anonymous peer review. Surveys were conducted prior to, during, and after the process to allow the researchers to investigate to what extent anonymity changed the way students approached each other and their own self-reflection.

ピア・レビューとは、教室の中で生徒たちがお互いに作文を読み、それに対してコメントや評価をし、その過程で生徒たちのライティングレベルを向上させる大学の英語のライティングクラスの活動である。また、ピア・レビューのもう一つの目的はその過程を通して生徒自身の長所や短所を発見することである。ピア・レビューを行うにあたって生徒たちは二つの役割を担う。一つはクラスメイトの英作文を通して自分自身を見つめ直す役割と、先生、あるいは批評家としてクラスメイトの英作文を評価する役割である。しかしながら、生徒たちが対面し後者の役割を遂行するとき、クラスメイトの英作文を評価することに抵抗を感じ、遠慮してしまうように思われる。本研究はこの先生としての役割の意識を軽減させることを試み、またこれにより生徒たちのピア・レビューに対する意識の変化を探ることを目的とする。本研究では大学一年生の英語のライティングクラスで対面形式のピア・レビューと匿名形式のピア・レビューの両方を行った。さらにピア・レビューを始める前、各形式のピア・レビュー後、そして最後にアンケート調査を実施し、これらの調査結果を元に匿名性がどう生徒たちのピア・レビューに影響したかを考察する。

THE IMPORTANCE of formative feedback in developing skills and improving performance is difficult to dispute. In any field of study, even the most talented and dedicated learner can surely benefit from the considered comments and advice of a third party observer. However, the utility of such formative feedback may vary considerably depending on how, when, and by whom it is offered. The field of L2 writing has seen substantial discussion regarding these issues: direct versus indirect correction (Robb, Ross, & Shortreed, 1986); focus on form versus focus on content (Fathman & Whalley, 1990); teacher versus peer feedback (Zhang, 1995; Jacobs, Curtis, Braine, & Huang, 1998); the list goes on. The latter pairing, as Jacobs et al. rightly pointed out, offers something of a false dichotomy, as there seems no

compelling reason why both these forms of feedback may not be successfully incorporated into a writing program. Rather than being direct alternatives, teacher and peer feedback can best be seen as complementary activities, with each offering advantages the other may not.

Benefits of peer review

Various advantages have been claimed for the use of peer review in L2 writing classes. Tsui and Ng (2000) found that peer review benefited learners in four ways: (1) the knowledge that someone other than the teacher will read their work promotes a sense of audience, (2) reading the work of others can develop students' awareness of their own mistakes, (3) peer to peer collaboration requires negotiation of meaning, and (4) students do not feel compelled to incorporate peer advice, as they may with that originating from the teacher.

In our own teaching situation, we have found the use of peer review to have a further, more prosaic advantage. Providing feedback on written assignments is perhaps the most time-consuming task teachers undertake outside the classroom; as such there is a practical limit to how often and in how much detail teachers can give feedback on any one assignment. Utilising peer review is thus a means by which learners can receive more feedback on their written work than would otherwise realistically be possible.

For all the reasons outlined above, we have regularly used peer review in our writing classes. However, despite the proposed advantages, we have frequently observed that the outcomes of these peer review sessions have been less successful than expected, with many students providing few, or sometimes no comments on their classmates' work: an observation that provided the impetus for the present study.

Problems with peer review

Two broad and inter-related areas of concern can be identified when examining the difficulties which arise when peer review is used in the L2 writing classroom: problems deriving from the students' language ability, and those relating to the students' feelings towards the peer review activity. Amores (1997) found that students' attitudes to peer review are significantly influenced by their perception of their partner's English ability. While Hansen and Liu (2005) claim that Vygotsky's concept of scaffolding supports the use of peer review, they fail to note that peer review does not always offer "the guidance of a more experienced individual": in many cases the peer reviewer may in fact be less proficient in English than the writer. Despite this, we firmly believe that even in this situation peer review can offer benefits to both parties; the students themselves, however, may be less convinced.

In addition to language ability, group dynamics and cultural factors also appear to influence the effectiveness of peer review. Carson and Nelson (1994) reported students' reluctance to offer any feedback they feel may be perceived as critical, concluding that "Japanese and Chinese students may not speak at all rather than say what…might hurt the writer's feelings" (p. 23). We feel it important to note, however, that this issue cannot and should not be characterized as an exclusively Asian one. Regardless of cultural background, offering meaningful constructive criticism requires considerable tact and sensitivity, and is thus neither easy nor stress-free, particularly in a second language.

The present study

In light of these issues, we decided to investigate the use of anonymous peer review as a possible means by which to overcome students' reluctance to provide constructive criticism of their peers' written work. By depersonalizing the process, it may be possible to provide students with a safe environment

in which they feel more comfortable giving honest feedback. Hosack (2003) found that 10 of the 13 Japanese first-year university students involved in his study preferred anonymous peer review to the more common face-to-face style. The present study considers a larger student body, but examines the same issue, comparing student attitudes towards anonymous and face-to-face peer review.

Methods

Participants

The participants in this research were 74 first year International Economics majors at a large private university in the Kinki region. For their English courses the students were divided into three classes lettered A, B, and C. Only data from the 70 students, 45 male and 25 female, who completed both types of peer review and all four surveys has been included in the study.

Each class studied English four times a week (Listening, Reading, CALL, and Communication and Writing), but for the Communication and Writing class, in which this research took place, the classes were subdivided into two groups. Each half was taught the same material at different times on the same day by the same instructor. Thus, for the purposes of the research, there were six groups (A1 - C2), each seen by an instructor once a week for 90 minutes.

Procedures

The peer review process

Prior to undertaking peer review, students were given some training in the process, so as to encourage them to write comments. During the course students wrote three assessed paragraphs of 160-200 words. The first received only summative teacher feedback, while the second and third were peer reviewed and re-drafted prior to receiving teacher feedback. All classes undertook anonymous peer review once and face-to-face peer review once.

Students typed their paragraphs for homework, including their names for the face-to-face peer review and omitting them for the anonymous. They were paired up and given 30 minutes in class to read their partner's composition. During this time, students wrote comments in English on their partner's work. Positive as well as negative feedback was encouraged. After face-to-face peer review, students gave oral feedback to each other in English. In anonymous peer review there was no oral feedback, a crucial difference.

The surveys

The research consisted of four surveys using a six-point Likert scale and an open comment box. Surveys were anonymous and provided in English and Japanese. Some of the surveys were piloted prior to the research and minor adjustments made.

The first survey (described as survey 1P and presented in Table 1) comprised nine statements that gauged students' feelings towards writing in English and key parts of the peer review process, such as receiving feedback. It was administered before any peer review had taken place.

The second survey (1A) was administered a week after the anonymous peer review and the third (1F) a week after the face-to-face peer review. The same nine statements were given to students to gauge any change in attitudes following the peer reviews. In addition, nine extra items pertaining to the peer review that students had just undertaken were added to the survey. Items 14 and 16 differed slightly in wording between surveys 1A and 1F. These two surveys are presented in Table 2.

The final survey (described as survey 2 and presented in Table 3) consisted of 12 new items comparing attitudes towards each

type of peer review. It was administered after the final peer review, and therefore after students had experienced both types of peer review and re-drafted both paragraphs.

Inevitably, survey 2 took place only one week after the second peer review, but several weeks after the first. To counter any effect this might have had, three classes (A1, B1, C1) did face-to-face peer review first and anonymous peer review second, and three classes (A2, B2, C2) the reverse.

Results and discussion

The resulting data was analyzed and is presented in Tables 1 to 5. For all items n = 70 unless otherwise specified.

Table 1. Surveys 1P, 1A, 1F

	Survey 1P			Survey 1A			Survey 1F		
	Median	Mode	Range	Median	Mode	Range	Median	Mode	Range
1. I enjoy writing in English.	4	3	5	4	4	5	4	4	5
2. Writing comments on my classmate's work is not a problem.	4	4	4	4	5	4	4	5	5
3. I want to show my work to my classmate.	3	3	5	3	3	5	3	3	5
4. I want to read my classmate's work.	4	4	5	4	5	5	4	4	5
5. My English level is good enough to help my classmate improve his/her writing.	2	2	4	2	2	5	2.5	3	4
6. My classmate's English level is good enough to help me improve my writing.	4	4	5	4	5	5	4	4	5
7. I feel uncomfortable writing on my classmate's work.	3	2	5	3	3	5	3	3	5
8. Negative feedback helps me improve my work.	5	5	3	5	5	4	5	4	3
9. Positive feedback helps me improve my work.	5	5	3	4	4	5	5	5	4

Note: 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=somewhat agree, 5=agree, 6=strongly agree

General trends

As can be seen from Table 1, there were small changes in the mode response, compared with the pre-survey, following each type of peer review. Overall, several things became apparent. After doing peer review students felt more positively towards writing in English (item 1). In general though, as item 3 indicates, students exhibit a certain reluctance to show their writing to others. In contrast to this, item 4 shows students want to read their peers' work, and items 8 and 9 show that students do believe that they benefit from feedback, thus suggesting they recognize the developmental benefits of peer review.

Students' dislike of showing their writing to others may be connected to their apparent lack of confidence in their English abilities, evident from the responses to items 5 and 6, which show that students have a negative perception of their own English ability and tend to think more highly of that of their peers. In all three surveys, over 70% felt their own English ability was insufficient to be of use in helping their classmates; in contrast, no more than 25% felt the same way about their classmates' abilities.

The difficulty of giving feedback

Of most interest to the researchers was whether anonymity made the peer review process easier for students. However, contrary to our expectations, student responses indicate that, in general, they did not find peer review difficult. For example, items 2 and 7 in all three surveys indicate that students did not feel writing on their partner's work to be a problem. From the mode it can be seen that this feeling was strengthened by doing peer review. In addition, items 10, 13 and 17 from Table 2 reinforce the point that most students did not find the process of giving and receiving feedback especially problematic.

Table 2. Surveys 1A and 1F Additional Items

	Survey 1A			Survey 1F		
	Median	Mode	Range	Median	Mode	Range
10. I worried about hurting my classmate's feelings.	2	2	5	3	3	5
11. My classmate's written feedback helped me improve my work.	5	4	4	5	5	4
12. It [would be/was] useful to know who commented on my writing.	2 (n=69)	2	5	3.5 (n=68)	3	4
13. I think my written comments were useful for my classmate.	4 (n=69)	4	5	3	4	4
14 (1A). My classmate's written feedback was difficult to understand.	2	2	5	N/A	N/A	N/A
14 (1F). My classmate's oral feedback helped me improve my work.	N/A	N/A	N/A	4 (n=69)	4	4
15. I felt like my classmate was criticizing me.	2	2	5	2	1	3

	Survey 1A			Survey 1F		
	Median	Mode	Range	Median	Mode	Range
16 (1A). I wanted to explain my written comments to my classmate.	2	2	5	N/A	N/A	N/A
16 (1F). I think my oral comments were useful for my classmate.	N/A	N/A	N/A	3 (n=69)	4	5
17. It was easy to find something to say about my class-mate's work.	3	3	5	3	3	5
18. Giving negative feedback was dif-ficult for me.	3	3	5	3	3	5

Note: 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=somewhat agree, 5=agree, 6=strongly agree

It can be seen from item 18 that students did not consider giving negative feedback difficult, and from item 10 that hurting their partner's feelings was not, in general, a concern. This conflicts with Carson and Nelson's (1994) finding that Japanese students may refrain from offering feedback due to these issues; however, their research was undertaken in an ESL classroom in the USA. It may be that in the more familiar and secure setting of a Japanese university students feel less reluctance to offer frank advice. Despite this, item 17 indicates that the process of giving feedback is not without difficulty, regardless of format.

Written and oral feedback

A crucial change to peer review when undertaken anonymously is the loss of oral feedback. However, this lack of face-to-face contact is also the reason anonymous interaction could be successful.

Item 12 of survey 1A indicates that not knowing who had written on their work was not a concern for students; similarly, item 12 of survey 1F shows that in the face-to-face format students did not feel it especially beneficial to know who their partner was. Nonetheless, as can be seen in Table 3, item 20 shows that, overall, students attach great value to discussing their writing with a partner. Figure 1 brings home visually the strength of feeling on this point. Given that a large number of the participants in this study indicated an overall preference for anonymous peer review (discussed below), it is somewhat surprising to note that only 8 students disagreed with the statement, "It was useful talking about my writing with my class-mate"; the implication being that even among those students who preferred anonymity overall, the majority nonetheless recognized the value of discussing their writing and receiving oral input from their peers.

The median responses to item 13 suggest students had slightly more confidence in the usefulness of their comments during anonymous peer review, perhaps indicating they were more able to write honestly when anonymous; however, this was not supported by a similar change in the mode. Even in anonymous peer review, without discussion, students generally did not find written feedback difficult to understand, as indicated by item 14(1A). Neither did they feel that lack of oral feedback rendered the peer review process worthless (items 21 and 22).

In summary, it appears that the loss of oral feedback is not a disadvantage for the recipient of anonymous comments, even while students say they want to discuss things face to face. Despite this, it may be that something is indeed lost: without

oral feedback, peer review becomes a one-way process, with no opportunity for negotiation of meaning or collaborative dialogue. Face-to-face discussion is, of course, a more complex dynamic, and more than simply a question of being useful or not. The researchers observed that many students seemed to *enjoy* the social interaction of discussing their work, which, while not a measure of usefulness, could have influenced students' response to the item.

Table 3. Survey 2

	Median	Mode	Range
19. I preferred face-to-face peer review over anonymous peer review.	4	4	5
20. It was useful talking about writing with my classmate.	5	5	4
21. Anonymous feedback was ineffective because there was no oral feedback.	3	3	5
22. I found anonymous peer review useful to improve my essay.	4	4	5
23. Writing comments was more difficult during face-to-face peer review.	3	4	5
24. Giving oral feedback was difficult.	4	4	5
25. I would have liked to use Japanese to do peer review.	3	3	5
26. Oral feedback was more useful than written feedback in helping me improve my essay.	4	4	4
27. I changed my writing because of my classmate's comments.	4	4	5

	Median	Mode	Range
28. I found face-to-face peer review with oral feedback useful to improve my essay.	4	4	4
29. I enjoyed giving oral feedback to my classmate.	4	4	5
30. Writing comments was easier during anonymous peer review. (n=69)	4	3	5

Note: 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=somewhat agree, 5=agree, 6=strongly agree
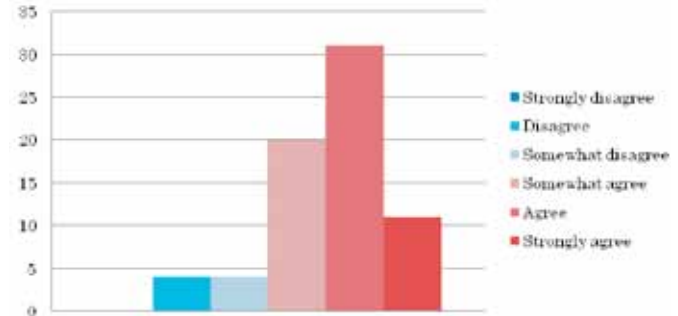

Figure 1. It was useful talking about my writing with my classmate

The overall preference

Contrary to both previous research findings and our own expectations, the participants in this study did not appear overly concerned that making critical comments during peer review would hurt the feelings of the writer. Similarly, after both forms

of peer review a majority felt that giving negative feedback had not been difficult (item 18, Table 2).

In light of the above, it is perhaps not surprising that the respondents did not show an overall preference for anonymous peer review, with 33 students stating they preferred this format, compared to 37 who expressed a preference for the face-to-face style, as shown in Table 4.

Table 4. I preferred face-to-face peer review over anonymous peer review

Type of response	Number of responses
Strongly disagree	5
Disagree	12
Somewhat disagree	16
Somewhat agree	18
Agree	13
Strongly agree	6

While these results indicate that most students did not have difficulties with face-to-face peer review for the reasons we hypothesized, it is important to note that, nevertheless, a substantial minority (47%) felt more comfortable with the anonymous format, and that although after both face-to-face and anonymous peer review there was broad disagreement with the statement "I worried about hurting my classmate's feelings" (item 10), this disagreement was stronger after the anonymous peer review.

The gender divide

When considering the student body as a whole, no strong preference for either type of peer review is apparent. However, when the results are split along gender lines, a startling difference of opinion emerges. Items 19 to 24 and item 30 of Table 5 all indicate that compared to the males, the female students felt more positively towards the anonymous format and less positively towards the face-to-face.

Table 5. Survey 2 showing male/female responses

	Male			Female		
	Median (n=45)	Mode	Range	Median (n=25)	Mode	Range
19. I preferred face-to-face peer review over anonymous peer review.	4	5	5	3	3	4
20. It was useful talking about writing with my classmate.	5	5	4	5	4	3
21. Anonymous feedback was ineffective because there was no oral feedback.	3	3	5	2	2	2
22. I found anonymous peer review useful to improve my essay.	4	4	5	5	5	3
23. Writing comments was more difficult during face-to-face peer review.	3	2	4	4	4	4
24. Giving oral feedback was difficult.	3	3	5	4	4	5

	Male			Female		
	Median (n=45)	Mode	Range	Median (n=25)	Mode	Range
25. I would have liked to use Japanese to do peer review.	3	3	5	4	4	4
26. Oral feedback was more useful than written feedback in helping me improve my essay.	4	4	4	4	4	3
27. I changed my writing because of my classmate's comments.	4	4	5	4	4	4
28. I found face-to-face peer review with oral feedback useful to improve my essay.	4	4	4	4	4	3
29. I enjoyed giving oral feedback to my classmate.	4	4	5	4	4	4
30. Writing comments was easier during anonymous peer review.	3 (n=45)	3	5	4 (n=24)	5	4

Note: 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=somewhat agree, 5=agree, 6=strongly agree

As can be seen in figure 2, item 19 shows a majority of males stated they favored face-to-face peer review and that females didn't feel the same way. Item 30, shown in figure 3, may explain the female preference for anonymous peer review, as it shows females as a group found it easier to write comments

during anonymous peer review. A Mann-Whitney U test found item 19 to be significant at the 0.05 level ($U = 729.5$, $p = 0.041$); however, item 30 was found to be non-significant ($U = 694.5$, $p = 0.051$).

Figure 2. I preferred face-to-face peer review over anonymous peer review
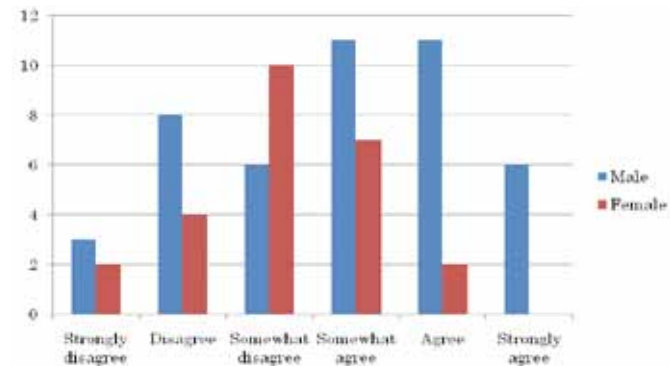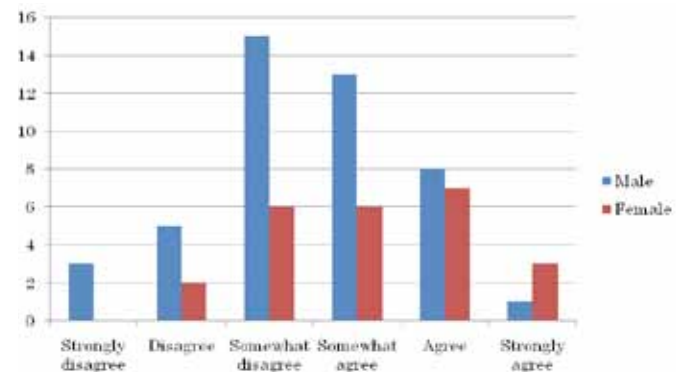

Figure 3. Writing comments was easier during anonymous peer review

The difference in the feelings of male and female students towards the two peer review formats was the most striking result of this research, and the one which raises the most questions - the most fundamental being whether these results do in fact show a gender divide. In every class, female students were in the minority, comprising one third or fewer of the class members in all six classes. As such, it is impossible to say with certainty whether these results represent a male-female or majority-minority issue, although interestingly, 12 of the 13 participants in Hosack's (2003) study were female, and 10 of the 13 identified anonymous peer review as their preferred option.

The role of gender in second language acquisition is, of course, a complex issue, detailed discussion of which is beyond the scope of this paper. Little research appears to have been done on the specific issue of the role of gender in peer review; however Chavez (2000) found females in male dominated classes less likely to utilize peer input than either their male classmates or females in female dominated classrooms, and Sommers and Lawrence (1992) observed that female members of student directed peer response groups spoke less frequently and less assertively than the males, both results suggesting that interaction in face-to-face peer review is not gender neutral. These findings may help account for the fact that in the present study 67% of female students found it easier to write comments during anonymous peer review and 64% indicated an overall preference for this format.

Limitations of this study and directions for future research

In its comparison of face-to-face and anonymous peer review, this study has only considered half the picture, the attitudes of students towards the two forms, and has not addressed the feedback itself. It would be of interest to ascertain whether there is any difference between these two methods in the amount and type of feedback generated, the rate of uptake, and ultimately the effectiveness of the feedback in improving students' final drafts. Furthermore, all the classes involved in this study were of similar size and gender make-up, each comprising fifteen students or fewer, no more than a third of whom were female. It may well be that the different patterns of interaction found in larger, female dominated, or single sex classes would generate quite different results to those reported here.

Conclusion

In this study, almost half the students preferred anonymous feedback, underlining the fact that teachers need to be aware of the complex issues which face-to-face peer review may raise for some students. However, although in certain situations, or for particular classes, anonymous peer review may be appropriate, the difficulty of incorporating oral feedback into this format would seem to be a significant drawback. Perhaps careful attention to group or pair formation, in particular in classes where the teacher is aware of a lack of cohesion, and explicit training on both how and why to carry out peer review would also be effective ways to overcome the concerns of those students who do have difficulty with the face-to-face method.

Bio data

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