
Poster Presentation

The Effect of Peer Review on Student Summary Writing in EST Courses

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Introduction

In composition courses, especially when the process approach is used, peer review is an activity done in the revising stage of writing in which students receive feedback about their writing from other students – their peers. It is also known as peer feedback or peer editing. Typically, students work in pairs or small groups, read each other's compositions and ask questions or give comments, scores or suggestions.

Peer review has been a rapidly growing activity in ESL/EFL writing classes in the past two decades. Many studies have shown the peer review process to be effective and to have many benefits for university students (Hansen & Liu, 2005; Mangelsdorf, 1992; Mendonca & Johnson, 1994; Villamil & De Guerrero, 1996; Hyland, 2000). For example, it helps them to gain a better perception of the process of writing and revising, enables them to develop their abilities to reflect on their own writings and revisions (Min, 2003), and raises their awareness of becoming better writers themselves (Stoddard & MacArthur, 1993).

The objective of this research is to demonstrate not only positive but also negative effects of a peer review project as a teaching and learning strategy for academic summary writing. This was done in multiple classes of an English for Science and Technology (EST) course at a Japanese university of science and engineering (S&E).

Case Study

The students of this “Technical English” course are third-year students of the Department of Informatics. The English proficiency level of the students is classified as intermediate. In Japan, university students, especially students of S&E, start their graduation research under the supervision of their professors in the fourth year. To familiarize the students with standard academic writing and eventually improve their integrated skills as independent researchers to meet the needs of globalization, many S&E professors assign students to read research papers, to write abstracts, summaries and research papers, and to do presentations, all in English. With the goal of preparing students for the assignments mentioned above, the students enrolled in this class were asked to complete several tasks during the one-year course.

The students in this study consisted of students from the various science and engineering disciplines in the Technical English Course of UEC Tokyo. A checklist was used for both peer and teacher evaluations. The overall procedure of the study is outlined in Figure 1.

Research Method

Ninety third-year students participated in this research. A checklist of 11 questions (Figure 2) was designed for the students to offer their feedback on their peer summaries of a popular science article chosen by the teacher. The research procedure is as follows. First, students write the first drafts of their summaries. Second, students do pair work by reading each other's summaries and finishing the checklist. Third, the teacher provides all the students with handouts of instruction on how to write a good summary and of a sample summary. Fourth, based on the content of the checklist, students are asked to revise their summaries

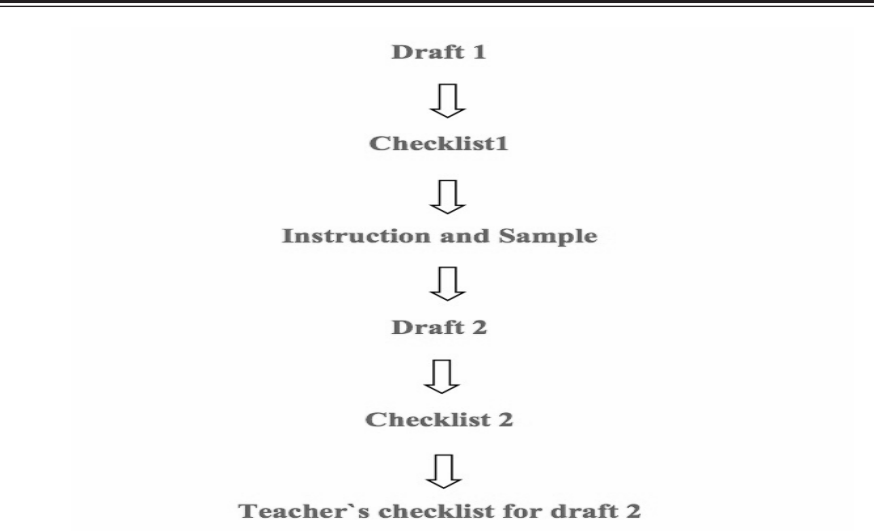


Figure 1. Flowchart of research procedure

Author's Name: _____		Reviewer's Name: _____
Did you or your classmate. . .		
1. write your topic sentence, stating the author's thesis and giving the title of the original?		
Yes	No	Some information missing
2. include the main ideas from the original text?		
Yes	No	Some ideas missing
3. select the most important details to support the main idea?		
Yes	No	Some details missing
4. avoid adding any information or comments that are NOT part of the original text?		
Yes	No	
5. make your/your classmate's summary the right length (with 150 words)?		
Yes	No	No indication of number of words
6. avoid asking questions or using dialogue?		
Yes	No	
7. write in your/his/her own words?		
Yes	Some phrases/sentences copied from the original text	
	Almost all phrases/sentences copied from the original text	
8. put the information in the same order as the text?		
Yes	No	Needs improvement
9. write in grammatically correct and fluent academic English?		
Yes	No	Needs improvement
10. use different types of sentences (e.g. sentences that do not begin with the same two words)?		
Yes	No	Needs improvement
11. write the summary in one paragraph?		
Yes	No	

Figure 2. Peer and teacher review checklist

to complete their second draft. Fifth, students review that draft from the same peers using the same checklist. The final step is for the teacher to read the second draft and complete the checklists for all the students.

Table 1

Summary of Student Checklist 1

	A1	A2	A3
Q1	40	36	14
Q2	68	3	19
Q3	64	2	24
Q4	77	13	NA
Q5	54	19	17
Q6	88	2	NA
Q7	31	41	18
Q8	79	5	6
Q9	69	2	19
Q10	70	9	11
Q11	63	27	NA

Table 2

Summary of Student Checklist 2

	A1	A2	A3
Q1	75	3	12
Q2	84	0	6
Q3	78	1	11
Q4	87	3	NA
Q5	71	6	13
Q6	88	2	NA
Q7	60	28	2
Q8	87	0	3
Q9	75	2	13
Q10	82	3	5
Q11	87	3	NA

Table 3

Summary of Teacher Checklist

A1	A2	A3
50	0	40
68	0	22
55	0	35
90	0	NA
15	1	74
90	0	NA
88	2	0
67	0	23
12	0	78
88	0	2
90	0	NA

Table 4

Comparison of Student Checklists 1 & 2

Answer (Yes)	Student Checklist 1	Student Checklist 2
Q1	40	75
Q2	68	84
Q3	64	78
Q4	77	87
Q5	54	71
Q7	31	60
Q8	79	87
Q9	69	75
Q10	70	82
Q11	63	87

Table 5

Comparison of Student Checklist 2 & Teacher Checklist

Answer (Yes)	Student Checklist 1	Student Checklist 2
Q1	40	75
Q2	68	84
Q3	64	78
Q4	77	87
Q5	54	71
Q7	31	60
Q8	79	87
Q9	69	75
Q10	70	82
Q11	63	87

Table 6

Comparison of A2 of Student Checklist 2 and Teacher Checklist

A3	Student Checklist 2	Teacher's checklist
Q1	12	40
Q2	6	22
Q3	11	35
Q5	13	74
Q8	3	23
Q9	13	78

Table 7

Comparison of A3 of Student Checklist 2 and Teacher Checklist

A3	Student Checklist 2	Teacher's checklist
Q1	12	40
Q2	6	22
Q3	11	35
Q5	13	74
Q8	3	23
Q9	13	78

Results

Tables 1, 2, and 3 summarize the results of students’ first and second checklists and the teacher’s checklist, respectively.

Tables 4, 5, 6, and 7 are the comparisons of results between students’ checklists and students’ checklists with teacher’s checklist.

Figures 3 and 4 show the results of Answer-choice 1 (A1), Answer-choice 2 (A2), Answer-choice 3 (A3) of students’ peer reviews in Checklists 1 and 2.

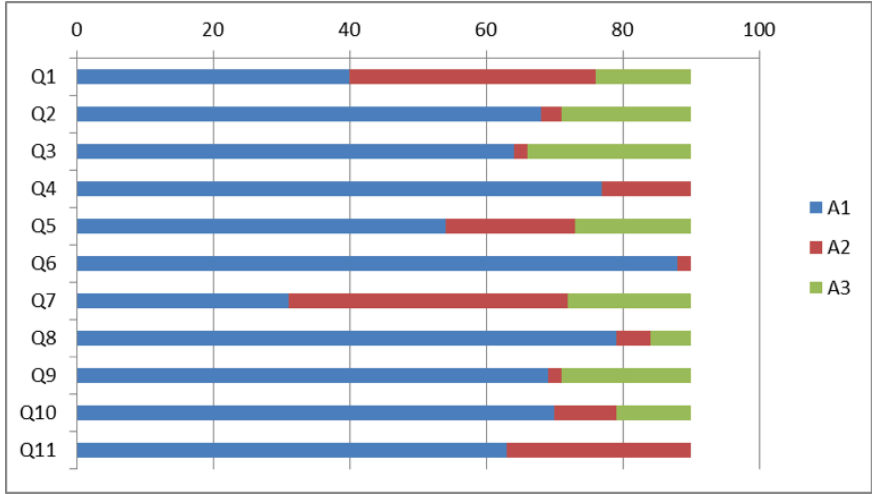


Figure 3. Summary of A1, A2 & A3 of Student Checklist 1

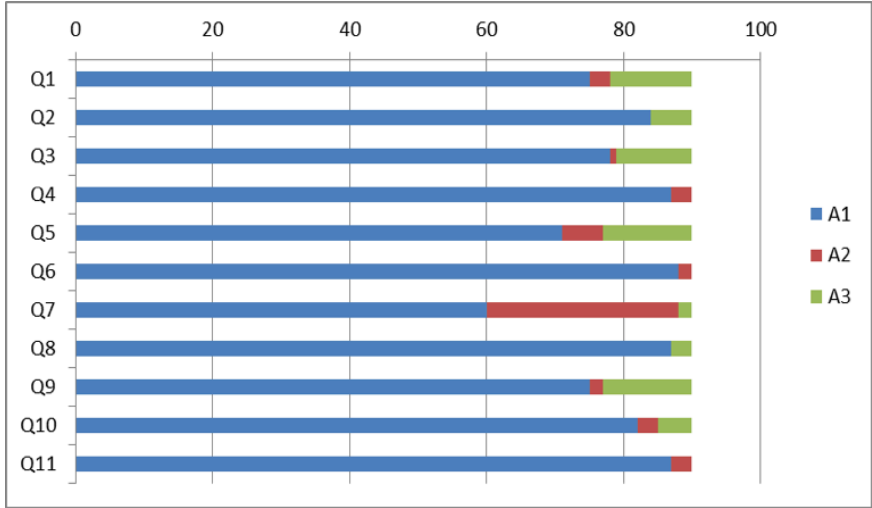


Figure 4. Summary of A1, A2 & A3 of Student Checklist 2

Discussions and Concluding Remarks

The results of the peer reviews and the comparison of the students' and teacher's review indicate clearly that peer review using a checklist is effective based on the following results and findings:

- Student Checklist 2 shows a greater use of "Yes" (A1) than before peer review, showing satisfactory overall improvements.
- Students' reviews are more positive than the teacher's mostly in aspects of language, indicating either students are less concerned about grammatical aspects or students need more training in reviewing language, or both.
- Students appear to be more conscious about the points on the checklist when writing Draft 2, which is one of the advantages of peer review.

Future works including interviews and discussions with students should be carried out to investigate the marked differences between students and teacher reviews shown here.

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