The Effect of the Peer-Review Technique on Students’ Writing Ability

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Abstract
The aim of this study was to investigate if there could be a significant positive effect by using Peer-Review Technique (PRT) on students’ ability in writing English. An experimental research method was used in this study. A writing test based on the indicators of Jacobs, et al. (1981) was completed by 65 undergraduate students in English from the English Department at the Faculty of Education and Teacher Training in the State Institute for Islamic Studies ‘Imam Bonjol’ at Padang. The students were divided into two groups: an experimental group (n=33) and a control group (n=32). Both groups were similar in terms of academic level, the given writing task and their target language [English] proficiency. The experimental participants were introduced to Peer-Review Technique in essay writing sessions whilst the control group participants were taught through the teacher’s traditional feedback (TTF) whereby students worked individually to produce their texts. The findings showed that PRT gave a significant improvement effect on the students’ writing abilities. This study is expected to serve as (1) data for further developing PRT; (2) input for lecturers in writing to develop more effective and innovative learning; and (3) additional material for the development of critical and cooperative learning theories in teaching writing.

Keywords: Peer-Review Technique, writing, writing ability, EFL teaching.

1. INTRODUCTION

Essay writing in Indonesian Undergraduate English programs constitutes the most important and challenging subject, since it shifts students’ ability from paragraph writing to scientific writing. The emphasize on producing a valid and strong argument in essay writing, for example, has been the center of interest amongst university writing
teachers, proposing collaborative learning which is adopted from ESL/EFL research perspectives. As proposed by Hensen and Liu (2005), collaborative writing, which has been used in U.S. educational institutes since 1970, encourages social interaction amongst writers and their peers through activities such as peer response. This social interaction and dialogue with others is also considered crucial for learning from complex to conceptual thinking (Ferris & Hedgcock, 1998; Vygotsky, 2000).

Research on students’ writing improvement suggests that writing instructors sometimes have reservations about its effectiveness due mainly to the concern that students lack cognitive sophistication and linguistic skills in judging writing and in revising and editing a piece of work (Jacobs, et al., 1981; Teo, 2006). Therefore, some modifications were advocated. Teo (2006) for example, proposed steps and procedures for pairing up the students and provides several guides for both writers and reviewers or collaborators. He suggests that students’ grouping should be based on their previous structural achievements.

Although students’ low competence in writing has long been recognized by writing lecturers in the Undergraduate English Program at the State Institute for Islamic Studies, ‘Imam Bonjol’ of Padang, little effort was given to enhance their learning in this specific skill. As shown by current observations, most students who have learned paragraph writing (Writing I) suffered from the inability to produce a qualified persuasive and/or argumentative essay. Their common problems were identified in all aspects by Brown (2007), Weigle (2002), and Jacobs, et al. (1981) who noted problems in EFL writing profiles such as poor content, organization, language use, vocabulary, and mechanics. Putting all their findings together, students have difficulties to express or to state their intentions or ideas, to provide sufficient support, and to manage to use appropriate grammar and choices of words in writing exercises.

Having a closer look at how these students come to accomplish their present skills in writing, the typical learning situation may be regarded as one of the sources of this failure. First of all, the lecturers are the dominant factor as they give the instructions and marked the work of the students. The students were generally not given any opportunity to express or improve their writing on their own using their own intelligence. Besides, most students relied on the lecturers’ comments or help to get a good score. Secondly, the lecturers relied on the students’ initial writings to make the final scores. This phenomenon suggests that the lecturers undermined the process through which professional writers accomplish their work. Thirdly, students were not facilitated with adequate sources from which they may take some valid ideas for their writings. Students sometimes got frustrated and left their tasks unfinished because the topics were far beyond their reach. We are sure that the situation will get worse when the students have to advance to Scientific Writing (Writing 3) where they have to write a paper with a summary and a research proposal/report, etc.

The researchers are very sure that approaches and methods, as well as techniques or strategies for teaching writing need to be revised so that a more challenging interaction will take place amongst the students. This is in line with previous findings that weak improvement in writing quality has often been attributed to expert or instructors’ nondirective or ambiguous feedback (Cho & MacArthur, 2009; Xu, 2007; MacArthur, 2007). Similar cases studied by Knoblauch and Brannon (1981) showed that teacher commentary in the past, focused as it was on errors and justifying grades, was dismally ineffective in helping student writers to improve. Recent research also
demonstrates that Peer Review appears capable of yielding outcomes at least as good as teacher assessment and sometimes better (Topping, 1998).

It is, therefore high time to maximize students’ interaction through peer response. In this study, we have implemented a Peer-Review technique to try to solve the above problems. Therefore, we set the objectives of this study as to (1) investigate if there is a significant improvement from using Peer-Review Techniques (PRT) on students’ writing abilities compared to Traditional Teacher Review [TTR].

2. REVIEW OF LITERATURE

2.1 Peer-Review Techniques in Writing

The term peer-review in this study refers to peer feedback (Gielen, et al., 2010), peer response (Liu & Hansen, 2002), or peer editing in teaching writing. Peer-Review is the use of learners as sources of information for each other in such a way that learners assume roles and responsibilities normally taken on by a formally trained teacher, tutor, or editor in commenting on and critiquing each other’s drafts in both written and oral formats in the process of writing (Hansen & Liu, 2005). In other words, peer-review supports process writing with a focus on drafting and revision and enables students to get multiple feedback (e.g. from a teacher, a peer, and from oneself) across various drafts. Most importantly, it builds audience awareness; helps make reading-writing connections; and builds better content, linguistically, semantically and rhetorically through multiple exposures of a draft text.

A recent study by Cho, Schunn and Charney (2006) contends that peer-review is ubiquitous in 1st-year compositions. Composition instructors have come to see peer review as an essential practice, partly because it ensures a round of drafting and revising and partly from an assumption that writers benefit both from commenting and from reading comments. However, given the myriad ways in which peer review is enacted in teaching writing, it is important to enquire further into the consequences, positive and negative of various aspects of the Peer Review process.

There are various reasons that account for the popularity of using Peer Review in writing classes at university level according to the literature: (a) students find peers’ feedback a valuable source of information and a supplement to any teacher’s feedback (Hu, 2005), (b) students find teacher’s feedback too general, vague, incomprehensible, and/or authoritative compared to feedback from peers which is perceived to be more specific (Zamel, 1985), (c) it helps teachers “to escape from the tyranny of red pen and explore an activity that can complement her own feedback to her students’ writing, collaborative peer-review is a potentially rewarding option” (Rollinson, 2005, p. 28), (d) the response and revision process contributes to more effective revision and critical reading (Rollinson, 2005; Mangelsdorf, 1992), (e) it provides a real audience for students’ writings (Rollinson, 2005; Suprajitno, 1998).

In line with the above opinions, Ferris (2003, p. 70) also acknowledges some practical benefits of Peer Review: (1) Students gain confidence, perspective, and critical thinking skills from being able to read texts by their peers writing on similar tasks; (2) Students get more feedback on their writing than they could from the teacher alone; (3) Students get feedback from a more diverse audience bringing multiple perspectives; (4) Students receive feedback from non-expert readers on ways in which their texts are
unclear as to ideas and language; (5) Peer Review activities build a sense of classroom community.

Other researchers contend that Peer-Review encourages collaborative dialogue in which two-way feedback is recognized for supporting their learning and knowledge development (Richardson, et al., 2007).

Learning is facilitated through the Peer Review process (Topping, et al., 2000; Wood & Freney, 2007). Other researchers consider that through this technique a sense of tolerance and acceptance towards peers’ criticism is developed (Rollinson, 2005). It improves confidence, helps to develop a sense of community and leads students to consider alternative strategies (Schultz, 2000). It allows them to be exposed to a variety of writing styles (Harris, 1992; Hu, 2005), and while reviewing, students benefit cognitively by articulating explanations to their peers (Wooley, 2007). These benefits are the frequently-cited merits of Peer Review regardless of its format.

Collaborative writing has been used in composition research and pedagogy in U.S. educational institutes since the 1970s. Collaborative writing encourages social interaction among writers and their peers through activities such as Peer-Review (Ferris & Hedgcock, 1998). This social interaction and dialogue with others are considered crucial for learning by theorists of social integration, such as Vygotsky (2000), who stated that learning involves the internalization of social interaction processes, which helps the learner progress from complex to conceptual thinking.

With Peer-Review, students are given plenty of opportunities to brainstorm ideas in pairs or groups, to give feedback on each other’s writing and to proof-read and edit for each other. While increasingly more mainstream classroom teachers are encouraging students to write in collaboration, ESL/EFL writing instructors sometimes have reservations about its effectiveness due mainly to the concern that students lack cognitive sophistication and linguistic skills in judging writing and in revising and editing a piece of work (Jacobs, et al., 1981). Researchers in the field of second language (L2) writing such as Perego and Boyle (2001) have pointed out that pairing students up in writing is an ideal way to promote learning effectiveness. It not only gives teachers more quality time to work with students but also provides students with plenty of opportunities to brainstorm ideas and to learn from each other.

However, Perego and Boyle (2001) also emphasized that students in the Peer-Review process need explicit guidelines for giving their partners constructive feedback so as to benefit the writing of their partners. Adopting Perego and Boyle’s suggestion (2001) and Vygotsky’s (2000) concept in which an individual learns to extend his/her current competence through the guidance of a more experienced individual, he, Vygotsky, will develop a structured and easy-to-implement peer assisted writing activity to compensate for the lack of structures in many existing paired writing methods.

Other advantages of Peer-Review are proposed by Liu and Hansen (2002), who state that the benefits of Peer Review include those listed below:

a. Benefits of Peer Review for the Student Authors:
• Refines their ideas as a result of the feedback they receive.
• Focus on writing as a process that emphasizes editing and revisions.
• Develops a better sense of audience.
• Improves their work before it is submitted for grading.
• Are motivated to produce higher-quality work, since they know their peers will be critiquing it.

b. **Benefits of Peer Review for the Students Reviewers:**
• Gain insights for their own work from reading the assignments of others.
• See other approaches to an assignment or other perspectives to an issue.
• Become familiar with important aspects of the assignment as they use the rubric or criteria to perform their review.
• Improve their ability to read a paper critically.
• Strengthen their communication skills, especially in respect to critiquing and providing feedback.
• Gain knowledge of a wider variety of course topics.

However, despite the potential benefits of Peer Review, in its conventional format, concerns remain with the quality of Peer Review (Lu & Bol, 2007). FFPR is plagued by some weaknesses such as (a) time constraints: usually not enough time is allocated for Peer Review in writing classes (Rollinson, 2005), (b) student characteristics and cultural differences: for example in some cultures like Chinese and many Asian cultures, e.g. Javanese, students shy away from criticizing their peers’ writing face-to-face (Rollinson, 2005; Carson & Nelson, 1996), (c) teachers’ inability to monitor each group simultaneously (Rollinson, 2005), (d) unequal participation (Warschauer, 1996), and (e) difficulties in oral production in L2 classes (Zhu, 2001).

3. **METHOD**

Two groups; an experimental group (n=33) and a control group (n=32) of fourth semester English students studying Writing II in English Education at Tarbiyah Faculty, State Institute for Islamic Studies, ‘Imam Bonjol’ of Padang in Academic Year 2012-2013 were chosen through cluster random sampling. The first group (Group A) was taught with PRT, while the second group (Group B) was taught with the teacher’s traditional feedback [TTF] in writing. To ensure the validity, each group was taught by a writing teacher with at least 20 years’ experience who had a master’s degree in TEFL. The two groups’ writing products were assessed by three different raters from outside the Institute using an EFL Writing Profile suggested by Jacobs, et al. (1981). The results of both groups’ post-test ratings were collected for comparison, and were analyzed by using t-test. A questionnaire was also distributed to the experimental group to determine the students’ responses to the use of PRT. In addition to the comprehensive data from the experimental group, the researchers also had the collected writings from the process for portfolio assessment.

4. **FINDINGS**

4.1 **The Effect of Peer-Review Technique on Students’ Writing Abilities**

The main data for this research was the scores from the students’ writing tests for both the control and the experimental classes. The written results were evaluated by
considering five components, namely: content, organization, language use, vocabulary, and mechanics (Jacobs, et al., 1981). The result of the tests for both the experimental and the control classes are shown as follows.

Table 1. Calculation of the comparison of means from the writing tests for both classes in terms of content, organization, vocabulary, language use, and mechanics.

<table>
<thead>
<tr>
<th>Aspects/Components</th>
<th>Experimental Class</th>
<th>Control Class</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \sum_{n \leq i} \frac{N}{n} )</td>
<td>( \sum_{n \leq i} \frac{N}{n} )</td>
<td></td>
</tr>
<tr>
<td>1 Content</td>
<td>717/33=21.72</td>
<td>526/32=16.43</td>
<td>5.29</td>
</tr>
<tr>
<td>2 Organization</td>
<td>514/33=15.57</td>
<td>403/32=12.59</td>
<td>2.98</td>
</tr>
<tr>
<td>3 Language Use</td>
<td>546/33=16.54</td>
<td>480/32=15.00</td>
<td>1.54</td>
</tr>
<tr>
<td>4 Vocabulary</td>
<td>625/33=18.93</td>
<td>538/32=16.81</td>
<td>2.12</td>
</tr>
<tr>
<td>5 Mechanics</td>
<td>138/33=4.18</td>
<td>115/32=3.59</td>
<td>0.59</td>
</tr>
</tbody>
</table>

Next, the interval data of the scores for the writing test from the experimental class is shown below.

Figure 1. Interval data of the scores for the writing test from the experimental class.

The graph in Figure 1 shows that 48% of students got scores 80-100, 45% of the students got writing scores from 60-79, and only 6% of the students got writing scores in the interval 40-59.

Meanwhile, the interval data of the scores for the writing test from the control class is shown in the following Figure 2.

Figure 2. Interval data of post-test scores for the control class.
The figure above shows that 50% of the control class students got writing scores in the interval 60-79 whilst, 43% of these students got writing scores in the interval 40-59, and only 6.25% of the students got writing scores in the top bracket 80-100.

In order to investigate the effect of the Peer-Review technique on the students’ writing ability, the data from this research was analyzed by using t-test analysis on the results of the students’ tests from both classes. Before analyzing the data using t-test, the researchers did tests for normality and homogeneity of the writing scores from both classes. The results of these calculations can be seen in Appendices 1 and 2. The result of the normality test for the experimental class was \( L_0 < L_{table} \); (0.106 < 0.154), which indicated that the data distribution of this class was normal. Meanwhile the normality test for the control class was \( L_0 < L_{table} \); (0.133 < 0.157), which also indicated the data distribution of this class was normal. In terms of homogeneity, the result was \( F_{calculate} < F_{table} \) (1.33 < 1.69) which indicated that both classes had homogenous variance.

4.1.1 Hypothesis Testing

After the scores from the writing tests for both the experimental and the control groups had been analyzed, the value of \( t_{observed} \) was obtained. The value of the \( t_{observed} \) was then compared. If the \( t_{calculated} \) was less or equal than \( t_{table} \) at the level of significance 0.05, then there was no increase in the students’ writing skills using the PRT. This would mean that the hypothesis was rejected. Meanwhile if the \( t_{calculated} \) was higher than the \( t_{table} \) at the level of significance of 0.05 then there was a significant difference between the writing scores of the students taught with TTF and those taught writing using Peer-Review. So the hypothesis would be accepted.

From the calculation of the t-tests for both classes, it can be seen that \( t_{calculated} \) was (4.319) while \( t_{table} \) is (1.645) at the level of significance of 0.05. In fact, \( t_{calculated} \) was much higher than the \( t_{table} \). Thus it was concluded that the hypothesis was accepted. In conclusion, the value of \( t_{calculated} \) is greater than the value of \( t_{table} \). This means that the hypothesis that teaching writing using the Peer-Review Technique with the students’ was more effective than using the teacher’s traditional feedback technique was accepted based on the statistical analysis.

5. DISCUSSION

The results of the study showed significant positive effects of using PRT to improve the writing skills and motivation of the experimental group of students. There are a couple of reasons that can explain why the PRT worked so well in this setting. First of all, cooperative learning or community writing which is represented in the Peer-Review activity has long roots within the Minang culture which is based in Padang. The sense of ‘togetherness’ as well as of ‘democracy’ has been one of the great legacies from Minang to this country, Indonesia. Second, by emphasizing corrections and/or comments from the students themselves, the traditional teacher’s feedback has been greatly reduced and this has diminished the negative effects of corrections/ criticism from the teacher on the grades of the students. These two reasons suggest that teaching writing skills should be conducted with respect to local cultures or traditions and ways
of suggesting or communicating improvements in the efforts of students should use positive evaluation formats.

The results further imply that merging teaching of Reading and Writing subjects, at least at the university level, is worth considering. Even though writing skills are acquired after reading skills (in the concept of Language Acquisition), one may propose that ESL/EFL learners could learn to write better if they are simultaneously exposed to teaching of effective and efficient reading skills under a Genre-Based Approach concept.

In order for the teacher to implement such a concept, much care must be given to select suitable topics to enhance the students’ critical thinking. Numerous text materials are now available on the internet and they can be adapted and adopted based on local needs. Last, but not least, formats for Peer-Review should be continually developed and revised to help improve the quality of Peer Review by the students themselves. Indeed, the Peer-Review format sheets determine and control the students’ activity, and therefore PRT teachers should take much care in the preparation of such review sheets.

6. CONCLUSION

Based on the finding of this research derived from the data analysis as reported above it can be concluded as follows.

Teaching writing using a Peer Review Technique strategy gives a significant improvement effect on the students’ writing ability by comparison with the Traditional Teacher Review Technique. This was proved by $t_{\text{calculated}}$ (4.319) whilst $t_{\text{table}}$ (1.645) at the level of significance of 0.05. Thus $t_{\text{calculated}}$ was higher than $t_{\text{table}}$.

The students’ in the experimental class got higher scores than the students in the control class especially in content, organization, vocabulary, and even in mechanics.

The use of the Peer Review Technique stimulated the students’ thinking and imagination in their writings. They felt it was easier to create a good text through using the Peer Review Technique because they were assisted to express their ideas and to arrange their ideas in written form by sharing with their partners.

In conclusion the Peer Review Technique has been proven to improve students’ writing ability. Therefore, it is proposed that lecturers in English should use the Peer Review Technique (PRT) as one option for teaching writing to stimulate students’ interest and critical thinking in writing. The students should then gain more confidence in exploring their abilities and ideas in writing which can improve their writing skills and the quality of their writing. It is also suggested that other researchers could carry out more in-depth studies on the application of PRT for other types of texts and that they may also use the information from this research as a useful input in teaching learning processes especially for teaching writing.

REFERENCES


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