Is the collaborative peer assessment model effective for genre-based writing in university?

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ABSTRACT

The existing peer assessment model for genre-based writing must be developed to gain the maximum quality of the assessment. It needs to be integrated with collaborative learning and problem-based learning and make the peer assessment part of learning. Thus, this research aims to determine the effectiveness of the peer assessment model in the group genre-based writing class. The method used was a quantitative method with a comparative design. The model was developed in the seventh semester of the English Education Department, Universitas Islam Negeri Salatiga, Indonesia. There are 23 pre-service English teachers (PSETs) joining the implementation developed peer assessment model collaborative genre-based writing peer assessment model. The result revealed that there is no difference between the score from the peer assessment and the score given by the lecturer. It can be concluded that the collaborative genre-based writing peer assessment conducted by students has similarities with the assessment conducted by the teacher. It supports that the students’ and teacher’s assessment has the same quality.

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1. INTRODUCTION

One of the English skills that is challenging to master and assess is writing. In order to teach writing that is appropriate and effective for students, lecturers need to have a solid understanding of the subject. English language teaching (ELT) teachers’ lack of assessment literacy is a challenge in implementing these assessment types [1]. Understanding students’ backgrounds, their current writing abilities, and factors that influence students’ writing development will help lecturers better understand effective writing instruction and meet the individual needs of each student [2]. Since writing pedagogy focuses on techniques for resolving issues, discovering ideas, expressing them in writing (such as thematic genres), and revising texts, lecturers must be aware of the significance of aspects of fulfilling and achieving competence through assessment tools. Text that appears, indicates the location of product writing [3].

Preparing instrument to assess genre-based writing must follow sort of principle in order to make sure the validity and reliability. Hurley and Blake [4] suggested several guiding principles that writing lecturers should be aware of before engaging in the practice of assessment using an assessment instrument: i) Assessment activities that help them to focus on their instructional decisions; ii) Each assessment activity that has specific goals-related objectives; iii) Assessment activities grow out of authentic learning activities; and iv) Student assessments are longitudinal where assessment must be done using both summative and
formative methods. The ager does this in addition to giving students grades in the form of numbers, but they can also give criticism that helps students to develop and improve their writing skills.

There are two kind of assessment that can be graded in writing class where each of the assessment has different aim. Summative assessment can be given if writing score is needed, meanwhile formative assessment describes further about the quality of students’ writing. The key characteristics of summative assessment were listed [5], such as: i) if the focus is on teacher evaluation, external tests, or a combination of these; ii) not cycling occurs as a regular part of learning but only when achievement is to be reported; iii) relates to the achievement of general goals stated in general terms; iv) provides results expressed in publicly available criteria for grades or grades; and v) it evaluates all learners. Formative assessment has three main goals, namely i) diagnosing student difficulties; ii) tracking progress over time; and iii) disseminating knowledge to help students learn more effectively [6]. Peer assessment is thought to be the best way to minimize the impact of one lecturer's assessment, which takes a lot of time when conducting summative and formative assessments, and to be able to achieve the assessment objectives quickly.

To do peer assessment with short of mechanism, a lecturer must ascertain the student’s current position to determine whether a student can work independently, with the help of other students, or with more experienced colleagues. The peer assessment model gives students the chance to participate in the evaluation process, ask questions, complete assessments, and give feedback in order to become more active learners. It helps students to fix their mistakes in writing especially basic mistake [7]. In order to gain the benefit of peer assessment, for students and their writing ability, collaborative learning can boost students’ ability to assess their peer’s writing.

Collaboration is characterized as an ongoing, coordinated effort to develop a “joint problem space” comprising common representations of the issue at hand [8]. For students to participate in group projects, collaborative learning encourages collective critical thinking [9]. Peer evaluation techniques can serve as creative exercises or as a tool to promote such abilities since the quality of the content and inventiveness in preparing the replies can be connected to creativity as “higher order thinking skills” [10]. All tasks, including those that are better performed by individuals, benefit from teamwork and collaboration [11]. Interactivity with peers, teachers, and online knowledge sharing behavior were all significantly impacted by collaborative learning that took place on social media [12]. Collaboration among students also increases students’ cultural competence [8]. These positive outcomes and advantages, however, cannot be realized without careful management of collaborative classroom activities.

Successful collaborative learning is defined as a process in which students actively manage group activities and plan out their group projects [13]. In their cooperative groups, students discussed the class activity in great detail [13]. Peer assessment that is carried out utilizing collaborative and supporting problem solving also has considerable potential to broaden students’ zone of proximal development (ZPD). The level of student assessment of the knowledge, understanding, and skill content is crucial when conducting paired assessments in order to establish instructional goals in which the learner’s ZPD can advance with or without assistance [9].

The following conclusions, however, are supported by a number of empirical facts: i) Pre-service English teachers (PSET) genre-based writing competence has not been able to significantly improve the process and results of classical learning; ii) Collaborative learning designs have not significantly aided problem-based learning; iii) Organizations for genre-based writing and current peer-assessment techniques for lectures on genre-based writing have not been properly prepared and procedurally used. The relevance and impact of problem-based learning in writing-based genres among PSET need to be continually improved; and iv) Collaborative learning organizational processes, genre-based writing content, and structure that contribute to the practice and development of peer assessment are not well recognized and comprehensively facilitated. This issue will help the researcher to determine the effectiveness of the peer assessment model in the group genre-based writing class.

The quantity and type of teacher and peer assessment differ significantly between the genres such as descriptive, narrative, argumentative, academic writing [10]–[12]. Lam [14] looked into the knowledge and beliefs of high school teachers in Hong Kong as well as the practices used in the classroom for writing assessment. The understanding of assessment among teachers is classified as pertinent and favorable in terms of alternative writing assessment. Unfortunately, based on the data collected through observation, these teachers only partially comprehend assessment of learning (AoL) and assessment for learning (AfL), but they do not comprehend assessment as learning (AaL). In actuality, after attempting AaL, participants could only mimic the “process,” failing to internalize its “essence” [14]. The genre-based portfolio assessment has debatable consequences because there is not enough proof that students participated in it, and it has no effect on how well they write [10].

To close the gaps, the descriptive and narrative writing abilities of 46 English as foreign language (EFL) undergraduate students were evaluated. As a result, despite the fact that students’ descriptive writing
had considerably improved word choice, grammar, and the development and organization of ideas, their performance on the post-test descriptive writing did not improve. The elements of narrative elaboration, language and vocabulary, structure and conventions, and students’ performance on the narrative writing post-test are also improved through portfolio evaluation. Qualitative information on student participation in portfolio assessment gleaned from their reflective journals shows frequent discrepancies student self-evaluations and instructor written feedback in terms of quality and quantity, “sensitivity” or concentration on specific writing traits over others, application of feedback by the teacher to the revision process, and the overall sense of writing development.

The introduction of peer assessment to students in the early age can build more positive result on students’ writing ability [13], [15]. Students have the chance to learn collaboratively through peer assessment by really supporting one another and sharing their experiences [16]. It enhances academic achievement [17], [18], EFL students’ independence and understanding of their own metacognition when completing writing assignments [19]. Peer assessment has the potential to effectively address the issue of the teacher-student ratio in Chinese higher education while also fostering the growth of a variety of learner abilities. Methods to increase the effectiveness of peer assessment demanded more attention because in prior studies students believed that teacher assessments were superior to their peers’ assessments [20].

Students’ perceptions of the purpose, nature, and value of peer assessment are reported to be significantly influenced by a dynamic and ongoing teacher support approach. Lu, Yang, and Li [21] explored the validity of peer assessment and acceptance of peer assessment through collaborative case learning outside the classroom. Using an experimental research design, the results show a statistically significant correlation, but there is no significant difference between group assessments and teacher assessments, so it can be concluded that peer-assessment can be used as a reference for teacher assessment. Students also found peer assessment based on collaborative learning outside the classroom useful and felt they benefited from peer assessment during teaching practice [21]. Peer assessment rather than self-assessment in terms of writing performance, shows that peer assessment is more effective than self-assessment [22].

Teachers work collaboratively and share a common vision in implementing genre-based teaching and assessment, ensuring that they integrate teaching and assessment through a focus on genre. The ecology of teachers’ work should take into account the use of genre-based instruction and evaluation. Research by Sumekto [23] looked into the efficacy of collaborative genre-based instruction for aspiring English instructors (PSET). Feedback from PSET encourages communication, responsibility, and interdependence. These characteristics result from group collaboration, where PSET works flexibly, completes tasks with high quality, and supports a good attitude throughout meetings and assignments. Through repeated measurement analysis of the general linear model (GLM), where \( F = 6.114 \) and \( p = 0.01 \), the feedback focused on enhancing learning in formative reflection.

According to this study’s findings, PEST responds favorably to collaborative genre-based writing feedback. According to the contribution it makes, collaborative writing peer criticism enhances students’ writing abilities and learning awareness, which results in a post-test [24]. Peer correction of student writing faults can result in a significant difference between the experimental and control groups (\( Z = -2.471; p = 0.05 \)) and can help students improve their writing. Peer feedback fosters reciprocal relationships among group members and improves students’ collaborative work, reducing the need for lecturer feedback [24].

Collaboration on peer evaluation is gradually becoming more commonplace online as well as in classrooms. Many massive open online courses (MOOC) have implemented peer assessment. It can also be used in e-learning settings [25]. In comparison to pre-service teachers who learned using the non-collaborative peer assessment approach, those who used the collaborative peer assessment approach demonstrated significantly better instructional video development quality and commenting quality, as well as higher self-efficacy and a tendency toward critical thinking [9]. Collaboration among students and the effects of collaborative writing and editing in Google Classroom are anticipated to boost motivation for completing tasks and lessen fear while obtaining peer criticism.

In addition, suggestions for enhancing collaborative writing and editing include shortening deadlines, defining roles for participants, and offering suitable direction when it comes to giving criticism. When used properly, Google Classroom can be found to be a useful tool for fostering learning among tertiary students [26]. For college-level English writing classes, incorporating peer assessments utilizing social media including can be engaging and successful [27]. In addition to classroom instruction, cooperative learning can help students develop their writing abilities and knowledge of English. Additionally, Facebook-based education can dramatically boost teachers’ creativity, students’ enthusiasm, and interest [28].

Last but not least, these findings can give teachers of ESL English writing courses helpful teaching tools. According to the students’ reflections, writing in groups has helped them become more proficient writers and feel more confident while creating texts [29]. The results revealed that after participating in collaborative writing, EFL students performed better while writing paragraphs. Additionally, the majority of the EFL students displayed a very favorable attitude toward the usage of group writing while learning to...
write in English. These results imply that collaborative revision can be incorporated into EFL writing instruction as a strategy to enhance writing and revision abilities [30]. This research is trying to examine the effectiveness of peer assessment model developed using research and development method.

2. RESEARCH METHOD

The method used in this study is comparative method. The comparative method is educational research that uses the technique of comparing an object with another object. According to Hudson [31], the comparative method is carried out to compare the similarities and differences of two or more facts and characteristics of the motorcycle taxis under study based on a certain frame of mind. The data was collected through writing test and documents.

There are two documents, those are students’ score from collaborative peer assessment and lecturer’s score toward students’ writing. There are 23 PSETs involved in collecting data through writing assignment. Those two data were later compared to see the effectiveness of students’ collaborative genre-based writing peer assessment. Data was analyzed quantitatively using Mann-Whitney test to see the effectiveness of model developed. Before that the data has passed normality and homogeneity test. The null hypothesis (H₀) is that there are differences between students’ collaborative genre-based writing peer assessment model and lecturer’s score, meanwhile the alternative hypothesis (H₁) is that there are no differences between students’ collaborative genre-based writing peer assessment model and lecturer’s score.

3. RESULTS AND DISCUSSION

3.1. Results

Peer evaluation data was gathered from peer assessment among students which was controlled by assessments conducted by lecturers after completing research in accordance with the plan and the peer assessment method. Students gather their works and turn them in to the teacher before conducting peer evaluation (researcher). The instructor (researcher) then determines the number of students who are working on the assignment. There were 28 articles have been compiled.

The teacher next divides the class into pairs or groups of two pupils. They (A) will receive their partner’s writing (B), and their partner (B) will also receive the outcome of their writing (A). Students are given the opportunity to spot mistakes and rectify them. They can identify the proper value offered based on the corrections they make. Students input the value and present the results of their peer editing and peer assessment to the teacher. The researcher examined the peer review findings after gathering the data. Five of the 28 papers evaluated were deemed invalid or damaged because students only evaluated one component or did not conduct peer assessments, resulting in the collection of 23 peer assessment findings. Table 1 shows the data descriptive statistics from both peer assessment and lecturer assessment.

Table 1. Data descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>N Statistic</th>
<th>Minimum Statistic</th>
<th>Maximum Statistic</th>
<th>Mean Statistic</th>
<th>Std. Error</th>
<th>Std. Deviation Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer assessment</td>
<td>23</td>
<td>65</td>
<td>90</td>
<td>80.00</td>
<td>1.305</td>
<td>6.260</td>
</tr>
<tr>
<td>Lecturer</td>
<td>23</td>
<td>57</td>
<td>95</td>
<td>79.65</td>
<td>2.028</td>
<td>9.726</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The descriptive statistics shows that peer assessment has 65 as minimum score and 90 as maximum score. Meanwhile lecturer’s score has 57 as minimum score and 95 as maximum score. Both of the data showed minimum score of 65 and 57 that is not far apart and does the maximum score, it is 90 and 95. However, it is clear that both sets of data have the same average, which is 80; each individual's value differs but not significantly.

Students only evaluate using the aforementioned criteria (A, B, C, and D). Since they do not particularly judge by numbers, it is clear that criterion A has the lowest score-27; criterion B has the lowest score-22; criterion C has the lowest score-17; and criterion D has a minimum score of 13 out of a possible 40. Because the writing teacher uses numbers while still taking into account the value criteria, the assessment she makes as a control value has a different value when compared to the peer assessment value. Peer assessments have a narrower range than teacher assessments when looking at the range or variance of values. The comparison of the two data is demonstrated in Figure 1.
Is the collaborative peer assessment model effective for genre-based writing in university? (Mazulfah)

A test is run to see if the hypothesis is true and to see if the peer evaluation performed is valid and comparable to the assessment performed by the teacher. A precondition test was performed in the past to choose the appropriate hypothesis test. The homogeneity test and the normalcy test are used for the prerequisite test. The test of homogeneity of variances was used to conduct the homogeneity test gained knowledge of Sig's importance namely 0.020, 0.034, 0.035, and 0.025. If the value of Sig, then that will be the deciding factor. If the value of sig.>0.05, the data is homogeneous. The data is not homogeneous if 0.05. The data is considered to be inhomogeneous since the significance value for the test of homogeneity of variances is less than 0.05.

The one-sample Kolmogorov-Smirnov test was then used to perform the normality test. It is an asymptotic value. Sig. is 0.194 (2-tailed). Making decisions depends on the value of Sig. If the value of Sig.>.05, the data is regularly distributed; otherwise, if the value is 0.05, the data are not regularly distributed. Asymmetric value sig. It may be deduced that the data is normally distributed because the (2-tailed) value is 0.194 higher than 0.05.

The non-parametric test is used to determine whether there is a discrepancy between the peer-assessment scores and the scores provided by the instructor since the data, despite being normally distributed, is not homogeneous. \( H_0 \) states that there is a discrepancy between the peer assessment's value and the lecturer's value, whereas \( H_a \) states that there is no discrepancy between the peer assessment's value and the lecturer's value. The Mann-Whitney test was used to test the theory, and the outcomes are presented in Table 2.

<table>
<thead>
<tr>
<th>Test statistics</th>
<th>Score from peer assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>250,000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>526,000</td>
</tr>
<tr>
<td>Z</td>
<td>-0.320</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.749</td>
</tr>
</tbody>
</table>

3.1.1. Grouping variable: Assessment
The basis for decision making is: i) if the Asymp value. Sig<0.05, then the hypothesis is accepted; ii) if the value of Asymp. Sig>0.05, then the hypothesis is rejected. So, based on the results of the Mann-Whitney test, Asymp was obtained. Sig. that is 0.794 which has a value greater than 0.05 then \( H_0 \) is rejected and \( H_a \) is accepted. This means that there is no difference between the score from the peer assessment and the score given by the lecturer.

3.2. Discussion
The outcomes of the peer assessment model created for genre-based writing addressed concerns that teacher and student assessments were not equal or balanced [21]. Nonetheless a peer assessment that was well-designed and implemented had the same quality as the assessment that was conducted by teacher [13], [20], [32]. The well-designed model also keeps maintaining competitive atmosphere in collaborative work.
It should contain clear direction regarding actionable comments, may provide students with useful feedback that improves their writing skill [32]. Teachers can be trained as well as the students to obtain the best positive result of peer assessment especially in the aspects graded in writing skill [15].

In line with the finding of this research where collaborative peer assessment is capable of being compared with teacher assessment, Lu, Yang, and Li [21] said that student peer evaluation can be utilized as a benchmark for teacher evaluation. The peer assessment evaluates not only the assessment itself, but also teacher evaluation and learning process evaluation. Besides that peer assessment can be a tool for monitoring students [11]. This finding also supports that peer assessment is more effective than self-assessment and teacher-assessment because it also offers an objective assessment similar to the teacher’s assessment [18], [22], [32] and there is no bias friendship in doing peer assessment [13]. We can argue that collaborative peer assessment is the best choice among other assessment in genre-based writing class since its effectiveness and objectiveness. Peer assessment is also suggested to be used in graduate education [32].

Collaboration on assessments benefits students’ writing and editing abilities [29], [30]. Students engage in collaborative group work where PSET operates flexibly, fully performs quality work, and contributes to a positive attitude during meetings and assignments that cause peer assessment to support motivation, interaction, accountability, and interdependence by working together to complete writing and then assessment activities [23], [25]. Peer feedback fosters reciprocal relationships among group members and improves students’ collaborative work, reducing the need for lecturer feedback [24], providing critiques and discussing the difficulties they have when writing [23]. Although the designed peer assessment method had to be implemented during a pandemic and required online implementation, it went well because peer assessment could also be done through a variety of platforms.

The implementation of the collaborative peer assessment in this research during pandemic challenges the students and lecturer where all of the process must be done in online way using several applications and platforms. In the process of creating peer assessment, researchers not only give students a location, a platform, or an application to utilize, but also explicit directions from lecturers using Google Meet, an online meeting application. Besides that, they used WhatsApp, Google Form, and Microsoft Office or Google Docs.

The use of these applications and platforms supports the implementation of collaborative peer assessment model. Previous research has proven online peer assessment is effective. Google Classroom is the platform that Lin [26] utilizes for group writing and editing. When used properly, Google Classroom is an application that effectively encourages learning among tertiary students [26]. Fitriaah [28] uses the Facebook application for writing and evaluation classes, which is unusual from the norms. He added peer evaluation of using Facebook to learn to write English, which made the usage of Facebook for college-level English writing lessons engaging and productive. The two applications, Google Classroom and Facebook, have been proven to conduct peer assessment, and this research adds WhatsApp, Google Form, and Microsoft Office or Google Docs.

4. CONCLUSION

Collaborative genre-based writing peer assessment is effective to be implemented to students of university. Based on these findings, the results of the Mann-Whitney test, Asymp was obtained. Sig. that is 0.794 which has a value greater than 0.05 then H₀ is rejected and H₁ is accepted. This means that there is no difference between the score from the peer assessment and the score given by the lecturer. The collaborative genre-based writing peer assessment conducted by students has similarities with the assessment conducted by the teacher. Well-designed peer assessment can have good quality as lecturer’s assessment. Although the grades that students produce have variants that tend to be the same and do not vary, they still produce an objective assessment of the writing results of their classmates. This supports the previous research related to peer assessment. To conduct collaborative genre-based writing peer assessment in online learning setting many applications can be used such as Google Classroom, Facebook, WhatsApp, Google Form, and Microsoft Office or Google Docs.

REFERENCES

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