



Online Peer Feedback Systems: Students' Attitude and Perceptions of Collaborative Learning in English Writing

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ABSTRACT

The paper examined the Online Peer Feedback Systems: Students' Attitude and Perceptions of Collaborative Learning in English Writing. The study pursued four objectives, posed four research questions, and tested four hypotheses. The parent population for this study comprised all 188 NCE II (2024/2025) part-time students enrolled in an English writing class who have used online peer feedback system for at least a semester. The sample size for this study was 155 students present on the day of data collection and have had experience on Online Peer Feedback System. The questionnaire was used as research instrument for gathering data for the study. All the 155 copies of the questionnaire were filled and returned. In order to establish the reliability of the instrument, test-re-test method was employed using 30 respondents from FCE Kano, which yielded reliability co-efficient of 0.80. The data collected were set on a Likert four-point rating scale thus: Strongly Agree (SA) – 4, Agree (A) – 3, Disagree (D) – 2, and Strongly Disagree (SD) – 1. To analyse the data collected, statistical Package for Social Science version 27 was used. It was decided that a mean score of 2.50 and above belongs to Agreed, while a mean score below 2.50 belongs to Disagreed. Findings showed a significant positive perception among students regarding the usefulness and effectiveness of online peer feedback systems in improving English writing skills of NCE students with a mean difference of 3.18, t-value of 8.45 and p (0.001). Students also exhibited a significantly positive attitude towards collaboration and peer engagement through online peer feedback platforms with a mean difference of 3.12, t-value of 7.56 and p (0.001). The students perceived peer-generated feedback received online as accurate or trustworthy for enhancing their writing performance with mean difference of 2.86, t value of 6.64 and a p (0.001). Students face significant challenges while participating in online peer feedback activities with mean difference of 2.82, t value of 7.36 and a p (0.001). Key recommendations were made, such as inclusion of online peer review in the writing of course Curriculum.

Keywords: Online, peer feedback, attitudes, perception, collaborative learning .

Introduction

Online Peer Feedback (OPF) has become a key tactic in teaching English, particularly in writing, as a result of the widespread use of digital technology in the classroom (DiGiovanni, 2001) and (Elboshi, 2021). According to Gao et al. (2024) and Zhan et al. (2022) Online Peer Feedback is the process by which students evaluate one another's written work using online tools like Google Docs, Peergrade, or Moodle and offer feedback and recommendations that aid in improvement and education. These systems support collaborative

learning environments where students participate as authors and assessors, permit asynchronous conversation, and foster reflection.

Online peer feedback system are technology-mediated platforms that enable students to provide feedback to each other on their work or performances (Adigüzel et al., 2016). Collaborative learning is a learner centered approach where students work together in small groups to accomplish a common goals. The activities offer mutual support for planning and implementing lessons, assessing students progress, sharing professional

concerns and addressing students needs (Bhandari, 2022).

Constructivist and social learning theories, which hold that learning is a socially constructed process, are consistent with the practice (Hus & Jančič, 2019). Additionally, it develops communication, independence, and critical thinking abilities (Muhammad, 2020). Nonetheless, the way that students feel about Online Peer Feedback can have a big impact on how involved they are and how successful the process is (Özkanal & Eren Gezen, 2023). Factors such as digital literacy, confidence in peer review, trust in feedback, and the perceived value of peer contributions are crucial in shaping their experiences (Aprilianti & Widyanoro, 2024). Hence, a systematic investigation is needed to explore students' perceptions and attitudes towards Online Peer Feedback and how it impacts their collaborative writing experience.

Problem Statement

Research on online peer feedback systems' efficacy and student satisfaction has yielded conflicting findings, despite the increased interest in incorporating them into writing teaching. While some students express uneasiness with peer evaluation, fear of judgement, or mistrust of the accuracy of peer input, others find Online Peer Feedback to be empowering and helpful. Furthermore, how students view and use Online Peer Feedback tools can be impacted by technological difficulties, a lack of desire, and insufficient training. Without a thorough grasp of students' attitudes, teachers might not be able to create feedback systems that actually improve learning. An empirical evaluation of students' perceptions of Online Peer Feedback systems, the difficulties they encounter, and the ways in which these perceptions impact their collaborative writing practices is required.

Objectives of the Study

The study sets to achieve the following objectives:

1. To examine students' perceptions of the effectiveness and of online peer feedback in the writing of English.
2. To investigate students' attitude toward collaboration and peer engagement through Online Peer Feedback platforms.
3. To explore the perceived quality and trustworthiness of peer feedback received online.
4. To identify challenges students face while participating in online peer feedback activities.

Research Questions

The following research questions were asked to direct the course of the study. These are:

1. What are the students' perceptions of the effectiveness of online peer feedback systems in the writing of English?
2. How do students view collaboration and peer interaction in online feedback activities?
3. What are students' attitudes toward the accuracy and trustworthiness of peer-generated feedback?
4. What obstacles do students grapple with while engaging in online peer feedback systems?

Research Hypotheses

The following hypotheses were formulated to achieve the objectives of the study:

1. There is no significant perception among students regarding the usefulness and effectiveness of online peer feedback systems in improving English writing skills.
2. Students do not exhibit a significantly positive attitude towards collaboration and peer engagement through online peer feedback platforms.
3. Students do not perceive peer-generated feedback received online as accurate or trustworthy for enhancing their writing performance.
4. Students do not face significant challenges while participating in online peer feedback activities.

Methodology

A quantitative descriptive survey research design was adopted for this research primarily because it is a sample population to be used to represent the entire population. The population of the study comprised all NCEII part-time students enrolled in an English writing class who have used online peer feedback system for at least a semester. There were 188 part-time students reading English at NCE II in the 2024/2025 academic session. This is based on the official data obtained from the part-time unit, Federal University of Education Zaria (2025). The sample size for this study was 155 students present on the day of data collection, who have had experience on Online peer Feedback System. The sample size was determined based on the fact that the population was not much. The data collection instrument for this study was a researcher-based developed structured questionnaire entitled Online Peer Feedback Systems on Students' Attitudes and Perceptions of

Collaborative Learning in English Writing Questionnaire (OPFSSAPOCLEWQ). The Questionnaire was prepared using Likert Scale. The respondents were made to react to each item on a five-point scale ranging from. SA – Strongly Agree (5), A – Agree (4), U – Undecided (3), SD – Strongly disagree (2) and D – Disagree (1). The Questionnaire is divided into five (5) parts – A-E. Part A requested the respondents to provide their personal information, while Parts B to E contained statements aimed at answering the questions raised by the study. The instrument was vetted by the experts from English and Literary studies and Computer Science Education Departments, Ahmadu Bello University, Zaria. The initial draft copies of the questionnaire, objectives of the study, research questions and hypotheses were given to experts from the departments mentioned above. The experts judiciously examined the items of the questionnaire with reference to contents' relevance, diction etc. in relation to the objectives of the study. All of these were aimed at ensuring that the instrument was adequate and relevant to the study. The OPFSSAPOCLEWQ was subjected to trial testing using 30 respondents from Federal College of Education, Kano, that shares the same characteristics with the study population but outside the area of this study. The reliability coefficient indices of the instrument was established utilising Cronbach Alpha method for estimating reliability. The instrument was administered once. The study adopted the 0.64 as the minimum threshold for accepting the reliability strength of the instrument. The researchers sought official permission of the Department of English, Federal University of Education, Zaria, to obtain data for the research. The researchers physically distributed the questionnaires was numbered serially from 1 to 155. The respondents were given 30 minutes (which was deemed ample enough to enable the respondents to critically examine

the questionnaire items and respond appropriately) to fill the questionnaires and return to the researchers. The study used percentage and frequency counts to present the demography of the subjects such as course combinations, gender, status/category and their online peer feedback experience. The research question were analyzed using frequency counts: percentage, arithmetic means and standard deviation to obtain overall average scores. T-test was used to test the null hypotheses at 0.05 alpha level of significance.

RESULTS

Research Questions

Mean response view was used to answer research questions. For inferential testing one sample t-test was adopted to test the significant effect of the Interactive Approach on the students' performance in reading comprehension.

The completed questionnaires were checked, coded, and analyzed using mean statistics to answer all research questions.

Mean is expressed as:

$$x = \frac{\sum fx}{\sum f}$$

Where X = Mean

f = Frequency

x = Score value

\sum = Summation

The decision to be taken on each item of the questionnaire, 3.0, was taken as an average mean.

$$\text{Mean Score} = \frac{5 + 4 + 3 + 2 + 1}{5} = 3.0$$

Here, any value less than 3.0 was rejected, while any value greater than 3.0 was accepted.

Research Question One: What are students' perceptions of the usefulness and effectiveness of online peer feedback systems in English writing?

Table 1: Mean and Standard Deviation of students' perceptions of the usefulness and effectiveness of online peer feedback systems in English writing

Statement	SA	A	UN	D	SD	Mean	St.d ev
Online peer feedback helps me improve my writing.	91	45	2	14	1	4.38	0.17
I revise my drafts based on peer suggestions.	48	67	12	15	11	3.82	0.20
Peer comments help me identify grammar and structure issues.	51	67	9	13	13	3.85	0.19
Online Peer Feedback activities increase my awareness of audience expectations.	87	43	6	17	0	4.31	0.16
I find peer feedback as helpful as teacher feedback.	69	62	5	12	5	4.16	0.18
Receiving feedback from multiple peers improves my final drafts.	72	41	14	14	12	3.96	0.18
Online Peer Feedback helps me become more independent in writing.	72	56	7	15	3	4.17	0.21

The feedback I give to others also helps me improve.	67	63	6	8	9	4.12	0.19
Online Peer Feedback enhances my understanding of writing criteria.	61	56	5	17	14	3.87	0.16
I perform better in writing assignments due to peer feedback.	78	58	3	11	3	4.29	0.18
Grand Total	70	56	7	14	7	4.09	0.18

Table 1 shows that students enjoyed the use of online peer feedback systems in English writing with a mean rate of 4.38. Respondents felt more motivated when learning with videos with a mean rate of 3.82. Students were of the view that they concentrated better during video-based lessons with a mean rate of 4.85. Videos make English lessons more interesting with a mean rate of 4.31. Students were of the view that they preferred more video-based lessons in the future with a mean rate of 4.16. Students believed that videos help them understand English better than lectures with a mean rate of 3.96. Students felt relaxed when watching

educational videos with a mean rate of 4.17. Students were of the view that they remembered information better when presented in video format with a mean rate of 4.12. Videos are a helpful revision tool before tests with a mean rate of 4.87. Students believed educational videos improve their academic performance with a mean rate of 4.29.

Research Question Two: How do students view collaboration and peer interaction in online feedback activities?

Table 2: Descriptive Statistics Showing students' perceptions on how students view collaboration and peer interaction in online feedback activities

Statement	SA	A	UN	D	SD	Mean	St.d ev
I enjoy collaborating with peers in writing activities.	71	54	9	14	5	4.63	0.27
I feel comfortable sharing my writing with classmates online.	56	67	4	15	11	4.12	0.21
Online Peer Feedback promotes a sense of community among students.	73	67	3	7	3	3.93	0.19
I am motivated when I see others working hard on their writing.	80	43	10	17	3	4.31	0.71
Peer feedback discussions help me learn new perspectives.	69	62	5	12	5	4.18	0.28
I actively participate in Online Peer Feedback sessions.	58	41	26	15	13	4.16	0.18
I appreciate being part of a collaborative learning environment.	72	56	7	15	3	3.76	0.31
Peer interactions online are respectful and constructive.	62	63	11	8	9	4.17	0.39
Online Peer Feedback allows me to learn from both strong and weak writers.	61	56	5	17	14	4.05	0.39
I believe collaborative writing is more effective than working alone.	58	67	13	12	3	3.87	0.18
Grand Total	66	58	9	13	7	4.06	0.31

Table 2 reveals that students enjoy collaborating with peers in writing activities with a mean response of 4.63. They feel comfortable sharing their writing with classmates online with a mean response of 4.12. Online Peer Feedback promotes a sense of community among students with a mean response of 3.93. Students are motivated when they see others working hard on their writing with a mean response of 4.31. Peer feedback discussions help students learn new perspectives with a mean response of 4.18. Students actively participate in Online Peer Feedback sessions with a mean response of 4.16. Students appreciate being part of a collaborative

learning environment with a mean response of 3.76. Peer interactions online are respectful and constructive with a mean response of 4.17. Online Peer Feedback allows students to learn from both strong and weak writers with a mean response of 4.05. Students believe collaborative writing is more effective than working alone with a mean response of 3.87.

Research Question Three: What are students' attitudes toward the accuracy and trustworthiness of peer-generated feedback?

Table 3: Mean and Standard Deviation of students' perceptions and attitudes toward the accuracy and trustworthiness of peer-generated feedback

Statement	SA	A	UN	D	SD	Mean	St.dev
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Peer comments are usually helpful and constructive.	62	50	2	21	18	3.76	0.23
I prefer receiving feedback from more experienced classmates.	61	53	3	23	13	3.82	0.51
I take peer suggestions seriously in revising my work.	46	67	2	25	13	3.71	0.17
I feel confident in giving useful feedback to others.	59	56	4	24	10	3.85	0.29
The feedback I receive is usually clear and understandable.	68	53	5	19	8	4.01	0.18
I believe peers provide feedback in good faith.	71	51	4	15	12	4.01	0.21
I sometimes doubt the accuracy of peer feedback.	59	54	5	26	9	3.84	0.39
I cross-check peer suggestions with external sources or teacher comments.	61	54	6	17	15	3.84	0.56
The feedback process helps me reflect on my own writing.	61	43	12	16	21	3.70	0.68
Grand Total	63	67	6	15	2	4.14	0.34

Table 3 reveals that respondents trust the feedback they receive from their peers with a mean response of 3.76. Peer comments are usually helpful and constructive with a mean response of 3.82. Respondents prefer receiving feedback from more experienced classmates with a mean response of 3.71. Students take peer suggestions seriously in revising their work with a mean response of 3.85. Students feel confident in giving useful feedback to others with a mean response of 4.01. The feedback they receive is usually clear and understandable with a mean response of 4.01. Students

believe peers provide feedback in good faith with a mean response of 3.84. Students sometimes doubt the accuracy of peer feedback with a mean response of 3.84. Students cross-check peer suggestions with external sources or teacher comments with a mean response of 3.70. The feedback process helps students reflect on their own writing with a mean response of 4.14.

Research Question Four: What obstacles do students grapple with while engaging in online peer feedback systems?

Table 4: Mean and standard Deviation of students' perceptions on challenges students encounter while engaging in online peer feedback systems

Statements	SA	A	UN	D	SD	Mean	St.dev
I feel nervous about being judged by my peers.	71	70	2	8	2	4.31	0.43
Sometimes I do not understand the feedback given.	47	75	3	15	13	3.84	0.54
I find it difficult to provide constructive feedback.	65	74	2	7	5	4.22	0.32
Not all classmates take the feedback process seriously.	45	81	4	10	13	3.88	0.34
Technical problems (e.g., platform issues) interrupt the process.	64	67	5	8	9	4.10	0.21
I receive inconsistent feedback from different peers.	36	71	11	15	20	3.58	0.21
I lack confidence in evaluating others' writing.	59	67	5	11	11	3.99	0.21
Some feedback sessions feel rushed or superficial.	49	59	14	14	17	3.71	0.53
I would prefer more training for offering and receiving feedback.	61	54	12	5	21	3.84	0.68
Online Peer Feedback can sometimes create tension between classmates.	63	71	6	7	6	4.16	0.34
Grand Total	56	69	6	10	12	3.96	0.38

Table 4 shows respondents' point of view on the challenges students encounter while engaging in online peer feedback systems. Some of the itemised challenge as indicated by respondents are: some students feel nervous about being judged by their peers with a mean response of 4.31. Sometimes students do not understand the feedback given with a mean response of 3.84. Some students find it difficult to provide constructive feedback with a mean response of 4.22. Not all classmates take the feedback process seriously with a mean response of 3.88. Technical problems (e.g., platform issues) interrupt the process with a mean

response of 4.10. Respondents indicated that they receive inconsistent feedback from different peers with a mean response of 3.58 students lack confidence in evaluating others' writing with a mean response of 3.99. Some feedback sessions feel rushed or superficial with a mean response of 3.71. Respondents would prefer more training for offering and receiving feedback with a mean response of 3.84. Online Peer Feedback can sometimes create tension between classmates with a mean response of 4.16

Test of hypotheses

Hypothesis One: There is no significant perception among students regarding the usefulness and

effectiveness of online peer feedback systems in improving English writing skills.

Table 5: Mean and Standard Deviation of significant perception among students regarding the usefulness and effectiveness of online peer feedback systems in improving English writing skills

Variables	N	\bar{X}	Std.Div	Mean diff.	df	t	P	Remark
Agree	126	4.09	0.18					
				3.18	146	8.45	0.001	Significant
Disagree	21	0.91	0.45					

Table 5 shows that the agreed respondents have mean rate of 4.0 with standard deviation of 0.18, while disagreed respondents have mean rate of 0.91 with standard deviation of 0.45. The mean difference between the variables is 3.18. Since the calculated value of the t- test is 8.45 the is greater than the table value (5.23) ; the result of the study rejects the null hypothesis which says that there is no significant difference in the perception of students regarding the usefulness and effectiveness of online peer feedback systems in

improving English writing skills. Therefore, this study accepts that there is significant perception among students regarding the usefulness and effectiveness of online peer feedback systems in improving English writing skills

Hypothesis Two: Students do not exhibit a significantly positive attitude towards collaboration and peer engagement through online peer feedback platforms.

Table 6: Analysis of Students not exhibiting a significantly positive attitude towards Collaboration and Peer engagement through Online Peer Feedback Platforms

Variables	N	\bar{X}	Std.Div	Mean diff.	df	t	P	Remark
Agree	124	4.06	0.04					
				3.12	143	7.56	0.001	Significant
Disagree	20	0.94	0.0021					

Table 6 shows that the agreed respondents have mean rate of 4.06 with standard deviation of 0.04 while disagreed respondents have mean rate of 0.94 with standard deviation of 0.0021. The mean difference between the variables is 3.12. Since the calculated value of the t- test 7.56the is greater than the table value (5.23); the result of the study rejects the null hypotheses which say that Students do not exhibit a significantly positive attitude towards collaboration and peer

engagement through online peer feedback platforms. Therefore, this study accepts that Students do exhibit a significantly positive attitude towards collaboration and peer engagement through online peer feedback platforms.

Hypothesis Three: Students do not perceive peer-generated feedback received online as accurate or trustworthy for improving their skills of writing.

Table 7: Analysis of Students do not perceive peer-generated feedback received online as accurate or trustworthy for enhancing their writing performance

Variables	N	\bar{X}	Std.Div	Mean diff.	df	t	P	Remark
Agree	130	4.14	0.34					
				2.86	146	6.64	0.001	Significant
Disagree	17	.86	0.34					

Table 7 shows that the agreed respondents have mean rate of 4.14 with standard deviation of 0.35 while

disagreed respondents have mean rate of 0.86 with standard deviation of 0.34. The mean difference

between the variables is 3.26. Since the calculated value of the t- test 6.64 is greater than the table value (5.23); the result of the study rejects the null hypothesis which says that students do not perceive peer-generated feedback received online as accurate or trustworthy for enhancing their writing performance. Therefore, this study accepts thatStudents do perceive peer-generated

feedback received online as accurate or trustworthy for enhancing their writing performance.

Hypothesis Four: Students do not face significant challenges while participating in online peer feedback activities.

Table 8: Analysis of Students do not face significant challenges while participating in online peer feedback activities

Variables	N	\bar{X}	Std.Div	Mean diff.	df	t	P	Remark
Agree	125	3.96	0.44					
				2.82	146	7.36	0.001	Significant
Disagree	22	1.14	0.44					

Table 8 shows that the agreed respondents have mean rate of 3.96.14 with standard deviation of 0.44 while disagreed respondents have mean rate of 1.14 with standard deviation of 0.44. The mean difference between the variables is 3.26. Since the calculated value of the t- test 7.361.7 is greater than the table value (5.234); the result of the study rejects the null hypothesis which says that students do not face significant challenges while participating in online peer feedback activities. Therefore, this study accepts that students face significant challenges while participating in online peer feedback activities.

Discussion of Findings

There is significant difference in the perception of students regarding the usefulness and effectiveness of online peer feedback systems in improving English writing skills with mean difference of 3.18, t value of 8.448821 and p (0.001). This is in line with the findings of Vo (2023) who found out that students accepted that they can improve their writing skill through peer assessment, and that peer assessment helps students to recognize errors and find solutions to the errors. Students do exhibit a significantly positive attitude towards collaboration and peer engagement through online peer feedback platforms with mean difference of 3.12. t-value of 7.56 and p (0.001). This is in line with the study of Aydawati and Suratno (2023) who found out that students have positive attitudes towards online peer review. Students do perceive peer-generated feedback received online as accurate or trustworthy for enhancing their writing performance with mean difference of 2.86 t value of 6.64 and p (0.001). This is in line with Wu and Schunn (2020) who revealed that peer feedback can help students revise documents and improve their

writing skills. Irgin and Bilki (2024) examined the Turkish students’ perspectives on online peer feedback in L2 wrting. They found online feedback to enhance critical thinking, social interaction and community building in L2 writing. This is in contrast to Kaufman and Schunn (2010) who revealed that students sometimes regard peer assessment as unfair and often believe that peers are unqualified to review and assess students’ work.

Students face significant challenges while participating in online peer feedback activities with a mean difference of 2.82 t value of 7.36 and p (0.001). This is in line with Kerman et al. (2023) who found the use of technology to generally enhance effectiveness and efficiency of the peer feedback process that leads to improved learning outcomes.

Conclusion

The current investigation has elucidated substantial evidence regarding the perceived advantages and challenges associated with the implementation of online peer feedback mechanisms in the enhancement of written expression in English among students. The results demonstrate a statistically significant and affirmative perception of the utility and efficacy of these digital platforms (M = 3.18, t = 8.45, p < 0.001), indicating that learners acknowledge the pedagogical merits of obtaining and integrating feedback from peers within a virtual framework. Furthermore, the data highlight a markedly positive disposition among students toward collaborative involvement, with a mean difference of 3.12 (t = 7.56, p < 0.001), reinforcing the notion that online peer feedback cultivates a sense of collective learning accountability and the co-construction of knowledge.

Significantly, students also regard peer-generated feedback as credible and trustworthy, as indicated by a mean score of 2.86 ($t = 6.64$, $p < 0.001$), which emphasises the capacity of peer assessment to function as a valid source of formative evaluation within the current digital environment.

However, the study does not disregard students' considerable challenges when participating in online peer feedback activities ($M = 2.82$, $t = 7.36$, $p < 0.001$). These obstacles may arise from factors such as deficiencies in digital literacy, lack of confidence in peer evaluations, or difficulties in interpreting online feedback without the benefit of face-to-face clarification.

In summary, although online peer feedback systems present promising avenues for enhancing writing skills, collaborative efforts, and learner independence, their effective implementation necessitates comprehensive training, scaffolding, and explicit guidelines to optimise their utility and alleviate potential obstacles. Future investigations should examine longitudinal effects, disciplinary variances, and methodologies for improving the quality and consistency of peer feedback in virtual educational contexts.

Recommendations

The following recommendations were made based on the study findings:

1. Organised Online Peer Review in the Writing Course Curriculum

Peer review systems ought to be formally included into English writing teaching at educational institutions. Students already recognise the pedagogical benefit that structured integration reinforces and guarantees consistency in practice.

2. Teachers should plan frequent training sessions and workshops to help students become more adept at providing and accepting constructive criticism. To increase confidence in peer-generated information, emphasis should be given on tone, objectivity, clarity, and content correctness.

3. Teachers should foster a collaborative classroom environment by guiding group projects and providing scaffolded online interactions to encourage peer engagement. Students' good attitudes towards working with others will be reinforced, and deeper learning will be encouraged.

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