

The Effects of Online Peer Feedback on Chinese University Students' English Writing Ability

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Received: February 23, 2026

Revised: April 6, 2026

Accepted: April 10, 2026

Abstract

The main purposes of this study were 1) to study the effects of online peer feedback on Chinese university students' English writing ability; and 2) to investigate the perceptions of Chinese university students towards online peer feedback in English writing. The samples were 80 first-year non-English major students at Health College from Hebei Oriental University, Hebei Province, People's Republic of China in 2025-2026 academic year. They were obtained by using cluster random sampling technique. They were divided into two groups, one control group and an experimental group according to their English scores from the College Entrance Exams. The research instruments were lesson plans, writing performance tests and semi-structured interview. The obtained data were analyzed by using mean, standard deviation, independent samples t-test, dependent samples t-test and content analysis. The findings revealed as follows: 1) There was statistically significant difference between pre-test and post-test in the writing achievements of experimental group at $p < .001$. The students' English writing ability post-test mean score of the experimental group was higher than the post-test mean score of the control group with statistically significant difference at .00 level. 2) The experimental group students had positive perceptions towards online peer feedback for improving English writing ability with the content results from Chao Xing Platform. They found the usefulness of online peer feedback in English writing, the fairness of peers, the ease of platform usage and made emotional impact of self-motivation.

Keywords: paragraph writing, writing ability, online peer feedback, Chinese university students, perceptions

Introduction

Writing is a way to send your idea, message, and information to the targeted receiver. It is a kind of communication, especially in the 21st century. Nowadays English writing teaching in China has its own characteristics and challenges, shaped by educational systems, exam-oriented needs and language environment. A large part of teaching is centered on meeting requirements of major exams like college entrance

exam, CET-4/6 and IELTS/TOEFL. Grading standards and structured writing (e.g., argumentative writing) are prevalent. To increase exam scores, teachers can teach structured templates (for example, argumentative writing: introduction with thesis, supporting paragraphs, and conclusion) as well as language patterns. So students are lack of creative ideas and self-motivation. To solve the problems, this study concentrates on argumentative paragraph writing by using online peer feedback, which can develop students' ideas and encourage them.

There is little research on the effects of peer feedback on online (web-based) platforms on the writing skills and attitudes of English language learners (Blake, 2011; Pham, 2022; Zhang & Zou, 2022). There are gaps and discrepancies in the current findings that call for more studies.

This study seeks to address this gap by studying the effects of online peer feedback on Chinese university students' writing ability and investigate the perceptions of Chinese university students towards online peer feedback on writing ability. Adopting a mixed-methods approach, the study focuses on a defined set of variables to clarify the relationship between online peer feedback and writing skills among the target population (non-English major freshmen at the Health College, He Bei Oriental University).

The specific content of this study is as follows:

1. What are the effects of online peer feedback on Chinese university students' writing ability?
2. What are the perceptions of Chinese university students towards online peer feedback on writing ability?

Literature Review

1. College English Curriculum of Hebei Oriental University

College English curriculum is a general education course designed for non-art and non-sports undergraduate students (non-English majors) across the university. It is an essential component of China's higher education system. The course integrates core socialist values, emphasizing holistic development through cultivating proper values, cultural literacy, scientific thinking, critical reasoning, and self-directed learning abilities. College English focuses on language acquisition while strengthening students' listening, speaking, reading and writing competencies. The writing is centered around five thematic modules-Youth and Mission, Wealth and Prosperity, New Era and Digital Civilization, Chinese and Global Community, Sports and Social Civility, by using blended online-offline teaching model. It employs diverse approaches including task-based learning, collaborative projects, and inquiry-based methods to develop students' self-directed learning capabilities, teamwork skills, and communication proficiency. Based on this, online peer feedback is an effective way.

2. Theoretical Foundations of the Study

There were three theoretical foundations in this study, including the process-oriented approach, collaborative learning and Vygotsky's Zone of Proximal Development. Online peer feedback in writing is supported by these three interrelated theories. The process-oriented approach regards writing as a recursive process, where online peer feedback provides external input during drafting and revising, promoting iterative improvement. Collaborative learning emphasizes social interaction, enabling students to evaluate texts, negotiate meaning and develop critical thinking and

metacognition through asynchronous online exchange. Vygotsky's Zone of Proximal Development (ZPD) holds that peers offer scaffolding within learners' ZPD, helping them bridge the gap between independent and potential performance.

The process-oriented approach, "as a great development of traditional approaches of writing instruction" is becoming more and more prevalent and being proved to be effective and useful in improving college students' writing ability in many countries, China included. The research on the process-oriented approach began in the early 1980s and many researchers introduced it. Tribble (1997) defines it as "an approach to the input of writing which stresses the creativity of the individual writer, and which pays attention to the development of good writing practice rather than the imitation of models". According to the theory of it, writing is not just final production of text but a sequence, or steps. One of the important parts of process approach to writing is feedback which can be presented in the five stages of process writing, concluded by Tompkins (2014), with prewriting, drafting, revising, editing, and sharing included. Writing is "an exciting, eventful, evolving process" (Murray, 1982), which is similar to the idea of Zamel (1982) that it is "a process of discovering and creating significance."

Collaborative Learning or cooperative learning is another backup for online peer feedback. It was firstly promoted by Slavin, in America in the 1970s. According to Slavin (1980), it is a kind of class techniques that encourages students to do all kinds of learning activities in a small group or small team, helping each other, studying some materials and rewards students for the achievements or performance of the entire group, valuing the interactions among teacher and students as well as students and students, promoting students to have a cooperative learning sufficiently. The next leading proponents of the theory is Bruffee (1983) who states collaborative learning is a type of learning that takes place through communication with peers and he says in this way, there are certain, kinds of knowledge that are best acquired, which can encourage students to pool their resources and complete tasks they could not do on their own. Bruffee (1984) holds that writing is a collaborative social activity and learning in writing group is beneficial to each other and improves students' writing proficiency, because "students in writing groups negotiate meaning as they revise peers' writings". Peer feedback, as one kind of the cooperative learning, may provide more chances for students to discuss and exchange their ideas in a group in order to help each other and learn from each other. What's more, with the help of internet, peer feedback will enhance its goodness, relaxing students and promote more interest in writing.

The theory of Vygotsky's Zone of Proximal Development (ZPD) is also another support for the employment of online peer feedback in the EFL writing. Vygotsky (1978: p. 86) stated "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers." Vygotsky (1978) said that social interaction with peers was necessary for the internalization of thought and language. In the study by Donato (1994), interaction in group work was investigated. In a word, it can benefit all members of a group. In addition, with the help of internet, the peers' potential development can be more developed in the process of the peers' cooperation because of the relaxed and convenient learning community offered.

Together, these theories form a coherent foundation, with the process-oriented approach providing structure, collaborative learning offering social mechanisms, and ZPD unlocking cognitive potential, jointly enhancing writing quality and learner development.

Method

1. Research Design

A mixed-methods design was employed, integrating quantitative writing performance tests and qualitative semi-structured interviews (Creswell & Plano Clark, 2018). Quantitative and qualitative data were collected and analyzed separately. Integration occurred at the interpretation stage through side-by-side comparison of findings, allowing quantitative trends to be explained and contextualized by qualitative evidence. This design enabled simultaneous examination of broad teaching patterns and in-depth student experiences in large-class EFL contexts.

2. Research Site

This study selected Hebei Oriental University in China as its research site. The school was chosen for its representative characteristics, including large class sizes, diverse student backgrounds and advanced digital infrastructure (such as Chao Xing Platform). Focusing on a single school enables an in-depth and contextually grounded exploration of online peer feedback practices within large-class teaching environments.

3. Population and Participants

The population in this study included 1,110 non-English major freshmen at the Health College, Hebei Oriental University, Hebei Province, People's Republic of China in 2025-2026 academic year.

The participants in this study consisted of 80 first-year non-English major students from the Health College, Hebei Oriental University, Hebei Province, People's Republic of China in 2025-2026 academic year. They were obtained by using cluster random sampling method, according to their English scores from the College Entrance Exams. They were divided into an experimental group and a controlled group. The experimental group included 40 participants and the control group included 40 participants. They were obtained by using simple random sampling.

For the qualitative phase, ten interviewees were selected from the experimental group. According to their proficiency levels, the researcher divided the experimental group into 10 sub-groups consisted of 4 students: one high achiever, two intermediates, one low in each sub-group. Each of the ten came from different sub-groups by purposively selecting.

Research Instruments

To achieve the goal of the study, the instruments were employed in this study, which included: 1) lesson plans; 2) writing performance tests; 3) interview. These three instruments were described in details in the following sections.

1. Lesson Plans

Lesson plans were about English writing skills lessons for both control group and experimental group. There were 5 lesson plans with 3 periods, consisting of writing performance tests, classroom orientation, teaching and learning process. Each period took 60 minutes. These were 5 topics: 1) Youth and Mission- Words and Phrases for Ordering Ideas 2) Wealth and Prosperity-Writing a Topic Sentence 3) New Era and

Digital Civilization-Writing Supporting Sentences 4) Chinese and Global Community-Writing a Concluding Sentence 5) Sports and Social Civility-Writing an Argumentative Paragraph. The control group received the traditional teacher feedback whereas online peer feedback was used in the experimental group. Content validity was established through three experts' reviews. The lesson plan items were evaluated by domain experts in EFL education and research methodology using the Item Objective Congruence (IOC) method. The IOC value was 0.82, which indicated that the lesson plans were qualified.

2. Writing Performance Test

To investigate how the writing ability of the participants differed before and after the experiment, students were assigned with a pre-test and a post-test on college English writing ability. A pre-test and post-test chose the same one of the five topics. Five topics were 1) Youth and Mission 2) Wealth and Prosperity 3) New Era and Digital Civilization 4) Chinese and Global Community 5) Sports and Social Civility. The pre-test and post-test took approximately 60 minutes respectively, with a paragraph writing at least 120 words. It must include a topic sentence, supporting sentences and a concluding sentence. The test was administered to the samples of 80 first-year non-English major students from Health College, Hebei Oriental University, China. The test was edited and revised by the thesis advisors before proposing to the experts to examine the validity by using the Item Objective Congruence (IOC) method. The IOC value was 0.82, which indicated that the test was qualified. The scoring of writing performance was given by three raters according to the rubrics and checked by administrators.

3. Semi-Structured Interviews

To complement the qualitative data, the semi-structured interviews were conducted with ten purposively selected students from different sub-groups, according to their English proficiency levels. The interview protocol focused on students' opinions and suggestions for online peer feedback in English writing. The open-ended format allowed participants to elaborate on issues-perceptions and suggestions on online peer feedback, including the usefulness of online peer feedback in English writing, the fairness of peers, the ease of platform use and emotional impact of self-motivation. The validity of the semi-structured interviews was examined by the three experts through analyzing the Index of Item-Objective Congruence: IOC, which was 0.80. It indicated that the interview was qualified.

Data Collection

To collect the data, the researcher used writing performance tests (pre-test and post-test) and a semi-structured interview.

The design of this study was pre-tests and post-tests of two groups, one control group and an experimental group. The design was shown as Table 3.2 below.

Table 1

Research Design

Group	Pre-test	Treatment	Post-test
Control	T1	X1	T2
Experimental	T1	X2	T2

Source: Sai-yot (1995: 248-249)

As shown in Table 1 above, T1 pre-test was given to both control group and experimental group. X1 was teaching and learning with teacher feedback, while X2 was teaching and learning with online peer feedback. T2 post-test was given to both sample groups.

2. Semi-Structured Interviews Data Collection

Ten students participated in interviews. Each of the ten came from different sub-groups according to their English proficiency level in the College Entrance Examination. The interviews were conducted via online meetings in Mandarin, with each interview lasting between 10-20 minutes. During the interviews, the researcher followed a semi-structured interview outline. Preliminary patterns were used to inform follow-up prompts, allowing participants to elaborate on issues that emerged frequently in the quantitative data. This approach helped enhance the trustworthiness of the qualitative data by ensuring alignment between the quantitative trends and teachers' in-depth accounts.

Data Analysis

For quantitative data analysis, the researcher applied different techniques to different types of data. The researcher used SPSS 28.0 software to analyze quantitative data, i. e. , writing performance tests. The pre-test and post-test scores were computed to find out mean and standard deviation. Dependent samples t-test was used to compare the difference between pre-test and post-test mean scores of control group and experimental group. Independent samples t-test was used to compare the difference of pre-test and pre-test mean scores and post-test and post-test mean scores between control group and experimental group. For qualitative analysis, the researcher used the content analysis for the data of the semi-structured interview about perceptions towards online peer feedback on enhancing Chinese university students' English writing ability. Ten interviewees from experimental group were asked about the usefulness of online peer feedback, fairness of peers, ease of platform use and their emotional impact through Chaoxing platform.

Results

The results are drawn from the quantitative data of the writing performance tests and the content analysis of the interview.

Research Question One: What are the effects of online peer feedback on Chinese university students' writing ability?

This section shows the results of analysis of the quantitative data from the writing performance tests to compare Chinese university students' writing achievements before and after learning writing by using online peer feedback. To address this question, the researcher used quantitative data in terms of the comparison of the difference between pre-test and post-test mean scores. Evidently, the pre-test and post-test scores were from the control group and the experimental group. The scores were used to find out the statistically significant difference as shown in Table 2, 3, 4 and 5 respectively.

Table 2

Comparing the Difference between Pre-test of Control Group and Pre-test of Experimental Group

Test	Group	n	Total Scores	\bar{X}	S.D.	t	p-value
1.Pre-test	Control	40	20	11.58	2.24		
2.Pre-test	Experimental	40	20	11.12	1.60	1.96**	.06

** Statistically significant difference at .01

As shown in Table 2, it was found that there is no significant difference between the pre-test mean scores of control group and experimental group. That means the two groups were alike in writing ability before conducting the treatment with online peer feedback.

Table 3

Comparing the Difference between Pre-test and Post-test of Experimental Group

Achievement	n	Total Scores	\bar{X}	S.D.	t	p-value
1. Pre-test	40	20	11.12	1.60		
2. Post-test	40	20	17.28	.76	24.05**	.00

** Statistically significant difference at .01

As shown in Table 3, it revealed that there is statistically significant difference between pre-test and post-test in the writing achievements of experimental group at .00 level. That means Chinese university students had higher writing achievements after learning writing through online peer feedback.

Table 4

Comparing the Difference between Pre-test and Post-test of Control Group

Achievement	n	Total Scores	\bar{X}	S.D.	t	p-value
1. Pre-test	40	20	11.58	2.24		
2. Post-test	40	20	15.73	1.29	10.74**	.00

** Statistically significant difference at .01

As shown in Table 4, it revealed that there is statistically significant difference between pre-test and post-test in the writing achievements of control group at .00 level. That means Chinese university students had higher writing achievements after learning writing through conventional teaching.

Table 5

Comparing the Difference between Post-test of Control Group and Post-test of Experimental Group

Test	Group	n	Total Scores	\bar{X}	S.D.	t	p-value
1. Post-test	Control	40	20	15.73	1.29		
2. Post-test	Experimental	40	20	17.28	.76	8.91**	.00

** Statistically significant difference at .01

As shown in Table 5, it was found that there is significant difference at .00 level between the post-test mean scores of control group and experimental group. That means the two groups were different in writing ability after conducting the different treatments, whereas there was no significant difference between the two groups before the treatment. The post-test mean scores of experimental group are higher than the post-test mean scores of control group through online peer feedback.

Research Question Two: What are the perceptions of Chinese university students towards online peer feedback on writing ability?

Ten interviewees from experimental group were asked about the usefulness of online peer feedback (e.g. whether it improves your writing skills), fairness (e.g. whether peers are qualified to judge), ease of use (e.g. platform accessibility), and emotional impact (e.g. anxiety from receiving peer criticism or motivation from constructive feedback). Here are some of the results found on Chao Xing Platform.

1. Usefulness

Usefulness means the benefits of online peer feedback in English Writing. Here were the excerpts from the students 1 and 2 on Chao Xing Platform.

“I believe online peer feedback has significantly contributed to my English writing growth. By reading peers’ feedback on my word choice, I’ve learned to replace vague phrases with more precise vocabulary. This consistent input has made my writing more concise and impactful over time.” (Student 1)

“The most useful aspect of these activities, in my view, is the focus on grammatical accuracy and sentence variety. Peers frequently point out run-on sentences or incorrect verb tenses that I miss during self-editing. Their suggestions for rephrasing have helped me develop a more polished writing style.” (Student 2)

2. Fairness

Fairness means peers are qualified for feedback. Here was the excerpt from the student 3 on Chao Xing Platform.

“I think my peers are qualified to give feedback on my writing, and I generally feel the feedback is fair. They are at a similar English level and taking the same course, so they understand the requirements and common problems very well. They can notice mistakes or unclear expressions that I overlook because they read from an objective reader’s perspective. Most of my peers take peer feedback seriously and give specific, balanced comments instead of being too strict or too lenient. Even though they are not teachers, their judgments are reliable and fair for improving content, organization, and language use. I trust their evaluation and find it helpful for my revision.” (Student 3).

3. Ease of Use

Ease of use means Chao Xing platform is controllable and accessible. Here was the excerpt from the student 4 on Chao Xing Platform.

“I generally found the Chao Xing Platform easy to operate, with most able to locate the peer feedback section without difficulty after minimal instruction.” (Student 4)

4. Emotional Impact

Emotional impact means self-motivation from constructive feedback. Here were the excerpts from the students 5 and 6 on Chao Xing Platform.

“I’ve also noticed that giving feedback has improved my own analytical skills. Explaining why a certain sentence feels awkward to a peer forces me to articulate grammar rules and stylistic principles clearly. This process of teaching others has deepened my own grasp of English writing conventions.” (Student 5)

“While online peer feedback is not without its challenges-such as occasional vague comments-the overall impact on my writing has been positive. It has taught me to approach writing as a collaborative process rather than a solitary task, which has made me more confident in revising and refining my writing.” (Student 6)

The qualitative results reveal the overall positive perceptions and practical value of online peer feedback in English writing, covering four core dimensions: usefulness, fairness, ease of use, and emotional impact. Overall, the qualitative findings demonstrate that online peer feedback, supported by the user-friendly Chao Xing Platform, is effective in promoting students’ English writing ability, perceived as fair and useful, and capable of generating positive emotional and cognitive impacts on students.

Discussion

The researcher discusses the results of using online peer feedback to improve the English writing ability of Chinese university students and the positive perceptions of Chinese university students towards online peer feedback as follows:

1. A Comparison of Chinese University Students’ English Writing Ability before and after Learning through Online Peer Feedback

The result disclosed that the post-test mean score of Chinese university students’ English writing ability was higher than the pre-test mean score with statistically significant difference at .00 level. This could be explained that online peer feedback is efficient because students could improve their English writing ability after learning. Although the scores of control group improved, the scores of experimental group were higher. The students’ English writing ability is improved more after learning proficiently through online peer feedback. The researcher observed that students could write more clearly, correctly, and easy to be understood, and they were more confident. Online peer feedback could help students’ fairness and self-motivation. This is similar to Nguyen (2023) who stated peer feedback stimulated students to improve their writing skills as well as Pham (2022) who encouraged students to share their thoughts with peers.

The result showed that students performed better in their post-test after online peer feedback. The findings showed that online peer feedback is effective to improve Chinese university students’ English writing ability. But there is a limitation

that the study only involved the same writing topic, limiting the generalizability of the results across diverse topic contexts.

2. Perceptions of Chinese University Students towards Online Peer Feedback

The findings showed that Chinese university students had positive perceptions towards the online peer feedback on writing ability with the content results from Chao Xing Platform. This could be explained that the usefulness of online peer feedback in English writing could contribute to students' English writing growth. Also, the fairness of peers was qualified for feedback. Moreover, the ease of use enabled students to locate the peer feedback section without difficulty. The emotional impact improved students' self-motivation, analytical skills and students' confidence. This is similar to Li and Hebert (2024) who documented Chinese university students' positive perceptions of online peer feedback for English writing via educational platforms.

These findings further showed that online peer feedback creates a positive effect for students, where they co-construct writing knowledge and skills through equal interaction, fair evaluation and emotional support, making it an pedagogical approach for English writing teaching in Chinese higher education.

Conclusion

In conclusion, online peer feedback could improve Chinese university students' writing ability and Chinese university students had positive perceptions towards online peer feedback. This study made contributions as follows: 1) The results of the research will be as the guidelines for developing teaching, learning and research works for English teachers, other educators and persons who are interested in teaching writing by using online peer feedback; 2) The results of the research will be as the guidelines for the teachers in terms of choosing online peer feedback to improve English writing ability; 3) Hopefully, this research will be as the guideline for the novices who are investigating a research and also other people who strive for new knowledge learning, especially in colleges and universities. It can be one effective teaching approach that teacher and relevant person who are interested in this technique can apply in their careers to help their students to learn effectively.

Recommendation

Based on the above conclusions and discussion, this study proposes the following specific recommendations at the English writing courses, teachers and research levels.

In university English writing courses, teachers should integrate online peer feedback as a regular component. Since the practice has been shown to improve students' writing ability, it should not be used only occasionally but as a consistent part of the curriculum.

Teachers should provide clear training and guidelines for students on how to give and receive online peer feedback. Students' positive perceptions suggest they are receptive, but structured training can further enhance the quality and effectiveness of the feedback. Teachers should design online peer feedback tasks that are scaffolded and aligned with specific writing objectives. To maximize improvement, tasks should target particular aspects of writing (e.g., organization, coherence, grammar) rather than being overly general and choose different topics to do writing performance tests.

Teachers should use more technology platforms that are user-friendly and supportive of collaborative writing. Positive student perceptions indicate that the online environment is acceptable, so choosing intuitive tools can further increase students' engagement and participation.

After feedback is provided, teachers should encourage interaction and follow-up between peers. Since students value the process, creating opportunities for dialogues can deepen their understanding and help them apply the feedback more effectively in revision.

The future research should compare writing ability between learning through online peer feedback and other writing techniques. The further research should be employed online peer feedback with other classes in many levels of students. To see if online peer feedback works, the further research should compare with other teaching approaches with the same level in different places and different situation.

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