

The Effects of the Guided Dialogic Peer Feedback-Based Writing Instruction on Chinese EFL Students' Writing Performance in an Integrated Blended Learning Environment

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Article information	Abstract
Article history:	While extensive research exists on peer feedback and its effects on writing, there are few experimental studies that rigorously investigate the effects of guided dialogic peer feedback on students' argumentative writing performance. This study, adopting a mixed-methods approach, examined the influence of guided dialogic peer feedback within a blended learning setting on the writing performance of 63 university students studying English as a second language (L2). The participants from two intact classes were randomly assigned as an experimental group (31 students) and a control group (32 students). Over a period of 18 weeks, the experimental group engaged in guided dialogic peer feedback instruction, whereas the control group was given traditional teaching. Both groups were assessed through writing assignments on two different topics, administered as a pre-test and a post-test. Additionally, students from the experimental group filled out a questionnaire and some engaged in semi-structured interviews after the treatment. The study's findings, derived from a series of t-tests and ANCOVA, revealed that dialogic peer feedback significantly enhanced the students' writing performance. Furthermore, the questionnaire responses indicated a positive student perception towards this instructional approach, a sentiment echoed in the interview analyses.
Received: 1 Jan 2024	
Accepted: 21 Dec 2024	
Available online: 27 Dec 2024	
Keywords: Dialogic peer feedback Chinese EFL students Argumentative writing Blended learning	

INTRODUCTION

Globalization has led to increased international connections across various domains, emphasizing the need for a common communication medium. English has emerged as this medium, serving as a bridge for people from different linguistic backgrounds (Zeng et al., 2023). In China, the government views English proficiency as vital for global engagement, knowledge acquisition, and economic growth (Murray et al., 2023). Individually, English is essential for higher education (Feng & Adamson, 2019) and symbolizes high socioeconomic status, being a prerequisite for high-paying jobs (Sun & Rong, 2021). Given this importance, it's crucial for educators to develop effective teaching strategies.

Of all English skills, writing is both the most challenging (Baresh, 2022) and a strong indicator of linguistic competence (Hyland, 2019). Writing plays a pivotal role in integrating the four English skills, solidifying language input, aiding in its internalization, and ensuring its accurate use (Graham, 2019). The importance of writing is further underscored by its emphasis in standardized English tests for university students (Zhang, 2019). Consequently, aiding students in enhancing their writing skills is invaluable for teachers.

In traditional English classrooms, students are frequently distracted by various non-academic activities (Zhang, 2020). However, the shift to purely online learning has its drawbacks, such as feelings of isolation (Kaufmann & Vallade, 2020) and reliance on specific equipment. In the digital age, the responsibility of teachers has transitioned from being the primary knowledge distributors to facilitators assisting learners (Carrillo & Flores, 2020). A blend of online and offline instruction may address these concerns.

Feedback

Feedback is crucial for language learning. While students often prefer teacher feedback (Du & Ma, 2013), several problems are associated with it. Overloaded teachers in China might resort to simplistic grading, depriving students of valuable feedback (Mahmoudi & Bugra, 2020; Yu, 2021). Traditional feedback typically targets language mechanics rather than fostering genuine writing proficiency (Yu, 2021). The prevalent one-draft approach in China, coupled with the lack of student-teacher interactions, limits the effectiveness of feedback (Lee, 2014; Yang et al., 2006). Students might also lack diverse perspectives essential for critical thinking (Nicol & Macfarlane-Dick, 2006).

Other feedback sources include artificial intelligence, writing conferences, and peer reviews. Each has its limitations. AI doesn't necessarily lead to writing improvement since students are not required to act upon the feedback (Huang & Renandya, 2020). Writing conferences might be impractical for larger classes. While peer feedback can be beneficial (Lopez-Pellisa et al., 2021; So & Lee, 2012), it's not devoid of challenges.

Blended learning

An approach that combines benefits from both online and on-site learning is blended learning, which has grown since the 2000s (Güzer & Caner, 2014). Incorporating blended learning with peer feedback has gained traction given its effectiveness (Valero Haro et al., 2019).

Regardless of the effectiveness of peer feedback and blended learning in teaching writing, both methods have their own disadvantages. In terms of peer feedback, students may require teacher mediation for peer disagreements (Schillings et al., 2021; Zhu & Carless, 2018) and often don't engage in ongoing discussions after feedback (Filius et al., 2018). Online peer feedback settings demand additional instructional support for maximal efficacy (Noroozi et al., 2016). Implementing blended learning can be influenced by factors such as larger class sizes, insufficient classroom space, and inadequate face-to-face instruction resulting from the fact that students do have adequate exposure to the target language (Aborisade, 2013).

Despite the prevalence of English and the great importance of writing in learning English, the teaching of writing is far from satisfaction. In China, reduced class hours and poor assessment system has made the situation even worse (Ren, 2017). In particular, those students studying in independent colleges are prone to the faulty teaching of writing given their relatively poor English proficiency.

To address various educational challenges, the current study set out to investigate the effects of a teaching instruction that incorporates blended learning and guided dialogic peer feedback (GDPF). The results may not only allow instructors to recognize the value of the two methods, but may also provide practical direction for teachers seeking to improve their ability to do so. Moreover, institutional decision-makers may benefit from this study since it has the potential to provide some insight into the use of GDPF as a way to reinforce students' knowledge acquisition while also improving their writing performance in EFL settings. In the study, GDPF refers to a collaborative online learning activity where students are able to exchange ideas on the feedback given or received as well as reflect and act upon the feedback to make changes necessary in their writings. Students were required to exchange feedback online following strict, step-by-step guidance provided by the instructor.

Though technology is normally considered as a possible way to facilitate effective feedback practices (Meek et al., 2017; Pardo et al., 2019; Winstone, 2019) and apart from a few studies on online settings (Filius et al., 2018; Hewett, 2000; Tuzi, 2004), there seems to be an absence of empirical studies that justify the employment of guided dialogic peer feedback in blended courses in teaching of writing within the Chinese context. To fill this research gap, the present study intended to make contributions to the field by examining the effects of the GDPF in a blended learning environment on L2 argumentative writing by using a mixed-methods design with irrelevant factors controlled. A treatment spanning 18 weeks was carried out. The current study set out to address the two research questions:

Research question 1: Does the Guided Dialogic Peer Feedback-Based Writing Instruction (GDPF) in an integrated blended learning environment improve the participants' development of writing performance? If so, to what extent?

Research question 2: How do the participants perceive the Guided Dialogic Peer Feedback-Based Writing Instruction (GDPF) in an integrated blended learning environment?

REVIEW OF LITERATURE

Writing education is critical for students to meet their academic, professional, and civic responsibilities. Teachers play a crucial role in this process and can gain effective teaching methods through experience, professional development, and educational resources (Graham & Alves, 2021). In her study of nine writing teachers, Gadd and Parr (2017) identified eight dimensions to effective teaching practices. These dimensions include expectations (teachers should have clear expectations of what students can achieve); learning goals (teachers should give clear and operational goals); learning tasks (teachers should provide tasks that are

appropriate for students' needs and levels); direct instruction; responding to learners; motivation and challenge; organization and management (teachers should organize and manage their classrooms effectively); and self-regulation (teachers should enable students to self-regulate their writing practices).

In China, challenges in teaching college English writing include reduced class hours and the flawed evaluation method where multiple-choice questions play a significant role. Under this grading system, many students are anxious for immediate success and hesitant to invest further effort or time into improving their English, and English writing in particular. These challenges combined lead to student disengagement (Ren, 2017). Research in China has explored various approaches, from integrating reading and writing to using technology and IT platforms. While methods like the length approach have been gaining popularity, they have faced criticism for poor experimental design (Wen, 2005). Wen's (2005) "output-driven, input-enabled" hypothesis offers a newer focus, highlighting the significance of comprehensible output in language acquisition.

Blended learning

Blended learning (BL) merges traditional onsite and online learning (Wong et al., 2014). It aims to develop students' logical skills, enhance instructional outcomes, and encourage social interaction (Subramaniam & Muniandy, 2019). Research shows that BL caters to diverse learning styles and extends learning beyond traditional settings (Sejdiu, 2014). It promotes communication, cooperation (Hilliard & Stewart, 2019; Rovai & Jordan, 2004), and positive attitudes towards L2 writing (Hains-Wesson et al., 2015; Hosseinpour et al., 2019). Studies (Adas & Bakir, 2013; Liu, 2013; Pop & Slev, 2012) have demonstrated BL's effectiveness in enhancing communication and writing skills in EFL settings.

However, BL implementation faces challenges. Stein and Graham (2014) emphasized the need for a balanced review of online and offline settings and maintaining student engagement. Chen and Yao (2016) identified influencing factors like student, teacher, course content, technology, course design, and settings. Boelens et al. (2017) and Sahni (2019) pointed out challenges in flexibility, interaction, learning support, and emotional learning environment. Therefore, careful consideration is required to optimize student performance and enhance the learning experience.

Watson (2008) described a continuum of BL, ranging from fully online to traditional face-to-face settings with varying degrees of online integration. Staker and Horn (2012) categorized K-12 BL models into rotation, flex, self-blend, as well as enriched-virtual models. Graham (2006) proposed a framework for identifying effective blends of onsite and online learning, suggesting a mix that leverages the strengths of both. Hrastinski (2019) supported this by advocating for BL that facilitates communities of inquiry, incorporating cognitive, teaching, and social presence.

Dialogic peer feedback

To address challenges in teacher feedback, researchers have proposed student-teacher dialogic feedback (Ajjawi & Boud, 2017; Steen-Utheim & Wittek, 2017) where students and

teacher exchange ideas on the feedback given or received in a form of conversations or dialogs. However this increases teachers' workload, especially in large-scale learning contexts (Nicol & Macfarlane-Dick, 2006). Alternatively, peer feedback, rooted in Vygotsky's social-constructivist theory, is recognized as a student-centered approach that involves giving or receiving feedback between students. It enhances L2 writing motivation (Cui et al., 2021; Weng et al., 2023) and self-confidence as well as promotes L2 writing in terms of enhanced students' learning skills (Cheng & Dörnyei, 2007), abilities to reflect (Van Popta et al., 2017), and improved writing performance (Cho & MacArthur, 2011; Greenberg, 2015).

Dialogic peer feedback merges the benefits of dialog and peer feedback, fostering in-depth understanding through peer interactions (Filius et al., 2018). Challenges include finding time and space outside of the classroom (Zhu & Carless, 2018), desire for the teacher arbitration when peer disagreements occur (Schillings et al., 2021; Zhu & Carless, 2018), low student motivation for the process (Pond et al., 1995) and students' failure to take advantage of peer communication after receiving feedback because they consider peer feedback as asynchronous, inconvenient and public (Filius et al., 2018).

To optimize dialogic peer feedback, various strategies have been proposed. Yoon (2011) developed the Optimal BLW Model, which features an iterative writing process that incorporates blended learning activities. Students produce three writing drafts based on both the teacher and students feedback. However, students have to produce the drafts within two weeks, which may not be sufficient for students to reflect upon the feedback. Besides, too many tools are involved in the model, which may pose as a distraction when students try to find the right tool to do certain activity.

Nelson and Schunn (2009) proposed a feedback model based on an analysis of over 1,000 peer feedbacks. Specifically, feedback providers should incorporate in their feedback the following three parts:

1. Summary of the feedback provider's perception on the writing performance (including a tentative score based on the scoring rubric);
2. Location of the writing problems (on content, organization, and language use of the essays);
3. Possible solutions to the problems.

Er et al. (2021) suggested a three-phase dialogue framework for effective dialogic peer feedback, i.e., dialogue during planning and coordination of feedback activities, dialogue during discussion around feedback to support its uptake, and dialogue during conversion of the feedback into task engagement and progress. In this student-centered framework, instructors act as facilitators when disagreement or difficulties arise. For instance, some reviewing peers may have widely divergent opinions on the quality of the student work under consideration and struggle to reach an agreement. Instructors should enable student discussion to identify and clarify any misinterpretations of assessment criteria, student work, and peer opinions.

Relevant studies

Wood (2021) conducted a qualitative study on 14 undergraduates from a university in South Korea in a blended writing course using dialogic peer feedback. The data from surveys and semi-structured interviews demonstrated that the dialogic peer feedback could make feedback useful and help turn feedback into action, lower socio-affective barriers, as well as eliminate barriers of time and space.

In a case study by Ng and Yu (2021), 153 pre-service teachers participated as groups in an online peer assessment activity to enhance their abilities of academic writing. To increase participation in the peer assessment procedure, a fundamental element of dialogic interaction was explicitly introduced. According to the findings, students were interested in the procedure despite their perception that the 6-stage procedure was fairly difficult and their need for more training in peer assessment. Improved writing quality of students was also noted. The students valued the dialogic interactivity of peer assessment as it boosted their learning and they were pleased with the teaching strategies. The research attaches great importance to the use of dialogic interactivity to increase student involvement.

Interestingly, Noroozi et al. (2020) explored the gender-based distinctions in the quality of argumentative feedback, writing proficiency, and subject comprehension among male and female learners in a digital learning context. The research incorporated 201 biotechnology students who were assigned to compose an argumentative piece, engage in peer feedback in groups of three, and subsequently refine their initial essays using the feedback received. The research outcomes revealed a gender discrepancy in the caliber of argumentative feedback, with women providing feedback of a higher standard compared to men. Despite these differences in feedback quality, both genders showed comparable enhancements in their essay writing and understanding of content from the preliminary evaluation to the final assessment, with no significant disparities linked to gender. Though the researchers claimed that the argumentative feedback in the study was interactive, the 240-minute research involved only one round of providing feedback (50 minutes) and acting upon feedback (55 minutes). The nature of interactivity could be more convincing if students were allowed to exchange ideas pertaining to the feedback.

Schillings et al. (2021) carried out a study that intended to assess students' perceptions towards peer feedback and to examine the effectiveness of in-person peer interactions for enhancing understanding. The study incorporated 84 second-year university students from the Netherlands and employed a mixed-methods approach, involving surveys and focus groups. The quantitative data collected indicated that the students considered written peer feedback to be relevant and valuable, recognizing it as a crucial skill to be developed. The students advocated the educational benefits of both written feedback and in-person discussions. No significant distinction in effectiveness between these feedback modalities was found. The qualitative data from the study indicated that in-person interactions prompted students to further elaborate on their written feedback, allowing for more substantial and constructive contributions and instilling a sense of responsibility towards the feedback process. The research identified several key factors that influenced the feedback interaction, including the standard

of the written comments, the personal nature of the interaction, and the chance to amend their work based on the feedback. The study found that in-person peer discussion was instrumental in enhancing peer feedback by encouraging more detailed explanations and greater student involvement with the feedback received. The combination of written feedback and oral discussion can be seen as a form of asynchronous dialogic peer feedback. With reduced class time, it may not be feasible to conduct such feedback in large classes. In addition, the non-anonymity of dialogue is seemingly contradictory to the notion put forward by Saito and Fujita (2004) and Wang (2014). However, face culture in the Chinese context should be taken into account when designing online peer feedback (Zhan et al., 2022). As a result, anonymity seems to be a better choice for similar studies in the Chinese context.

By observing relevant studies, the researcher found a gap in research. Despite some research on the effectiveness of dialogic peer feedback on writing performance, few has provided empirical evidence so as to justify the employment of guided dialogic peer feedback in blended writing courses.

RESEARCH METHODOLOGY

Research design

This was a mixed-methods approach which employed an embedded experimental design (Creswell & Plano Clark, 2011). For the current study, due to an absence of empirical studies that justify the employment of guided dialogic peer feedback in blended courses in teaching of writing, quantitative data were collected to justify the employment of the proposed instruction while qualitative data were analyzed to triangulate the results derived from the quantitative data.

Research context

The study took place at an independent college in southwestern China, which ranked in the top 50% of such institutions. Founded by private educational entities, it had lower admission criteria than public universities. The college comprised 10 faculties, spanning liberal arts, sciences, and arts, with approximately 16,000 students and 800 faculty members. The yearly recruitment of English majors is around 350 students who are divided into 10 classes. English major students ranked in the top 34% in the "Gaokao" (Chinese College Entrance Examination), equating to a B2 CEFR level. The English program covers comprehensive language skills, Western cultures, and foundational translation knowledge. Students underwent 10-12 English class hours weekly. The first year focused on basic language skills, while subsequent years covered advanced subjects like writing and translation. The research targeted second-year students in the English Writing 3 course, where they learned to compose argumentative essays with no less than 200 words.

Participants

The participants in the study came from two intact classes of the English Department, aging from 19 to 21. None of them had received training in peer feedback. The participants were considered to be similar given their educational background and English proficiency. As they chose English as their major at free will, they were thought to be interested in learning English. To be more specific, a class of 31 students (4 males and 27 females) was assigned as the experimental group while a class of 32 (6 males and 26 females) students as the control group. Students from both groups were considered to have similar English proficiency as no significant differences were found in terms of their scores of Gaokao and TEM-4 (Test for English Majors Band 4, a standardized English proficiency test for English majors in Chinese universities) with p values of .486 and .111 respectively.

Instruments

In order to answer the two research questions, three instruments were employed. The first research question concerning the effects of the instruction on students' writing performance were responded by analyzing pre- and post-tests results; the second question of participants' perception towards the instruction was explored through semi-structured interviews and a questionnaire GDFQuest performed after the treatment. The treatment, namely the GDF, was adapted from the model proposed by Yoon (2011).

Pre- and post-tests: Those tests were selected from the writing sections of the past TEM-4. The topics were chosen for their high relevance to students' academic performance. Both writing topics, *online education* and *music downloads*, were not covered during the writing course. To measure the degree to which the data gathered from different writing tests were accurate representations of the variables examined, inter-rater reliability was checked by Intraclass Correlation Coefficient (ICC). ICC values should be no less than 0.75 to indicate a good reliability (Portney & Watkins, 2009). In addition, Weir (2005) asserted that the utilization of at least two raters in the evaluation process of a test augments the reliability of the outcomes in comparison to the engagement of a sole rater. Therefore, the current study analyzed scores from two other writing teachers and the researcher himself. All three raters had at least 5 years' experience of teaching writing. The results showed that ICC values for pre- and post-tests were 0.806 and 0.895, indicating the scores given by the research were reliable and could be collected as data for later analysis.

Semi-structured interviews: The interviews required students to engage in three guided discussions: (1) They were asked to draw comparisons between their previous experiences with traditional teaching methods and their experiences with GDF. (2) They were invited to share their views on using the online dialogic platform as a tool for communication and learning. (3) They were encouraged to offer recommendations for enhancing GDF, focusing on aspects such as learning materials, teaching techniques, dialogic tools, and activities.

GDPFQuest: The questionnaire was adopted from the validated questionnaire by Cañabate et al. (2019) and translated into Chinese to avoid possible misunderstanding. The five-point Likert scale questionnaire comprised 15 items which were divided into 3 clusters, namely perception of receiving feedback, perception of providing feedback, perception of cognitive improvement. The internal consistency reliability for the 15 questionnaire items and the 3 clusters were measured by Cronbach's Alpha formula: 0.953 (overall perception), 0.941 (perception of receiving feedback), 0.853 (perception of providing feedback), and 0.838 (perception of cognitive improvement), suggesting that the questionnaire had a relatively high reliability.

To assure content validity, both semi-structured interviews guided points and GDPFQuest items were validated by a panel of 3 experts in the field. The Index of Item Objective Congruence (IOC) was employed to evaluate the content validity of both instruments. The localized questionnaire items and interview questions were refined based on feedback from three field experts. The selection of questionnaire items and interview questions was contingent on an IOC result derived from the three experts, which was no less than 0.67.

Procedure

Before treatment

On Week 1, a 30-minute brief introduction to the study was given to both groups and the experimental group also received additional training on the dialogic peer feedback as well as the scoring rubric on the writing in order to ensure consensus among all participants.

A 60-minute pre-test was then conducted to both groups. Students would read a passage first, then summarize pros and cons mentioned, and finally pick one side and compose an argumentative essay with a minimum of 200 words within a time frame of 60 minutes. Their essays were graded with the analytic scoring rubric developed by McDonough et al. (2018) and scores were collected as data.

While treatment

During the treatment, all participants from both groups were required to follow the same in-class activities and write 4 argumentative essays on 4 controversial topics, i.e., *dark side of conservation*, *negative impact of intelligent machines on human brains*, *term-time holiday*, and *homework banning*. Similar to pre- and post-tests, students were asked to compose an essay of at least 200 words after reading a passage. Each essay followed a writing cycle (see Figure 1) adapted from the model proposed by Yoon (2011) with more time allocated and one universal online platform. At the 4th week of each writing cycle, the teacher evaluated all the final drafts by the same analytic scoring rubric used in pre- and post-tests.

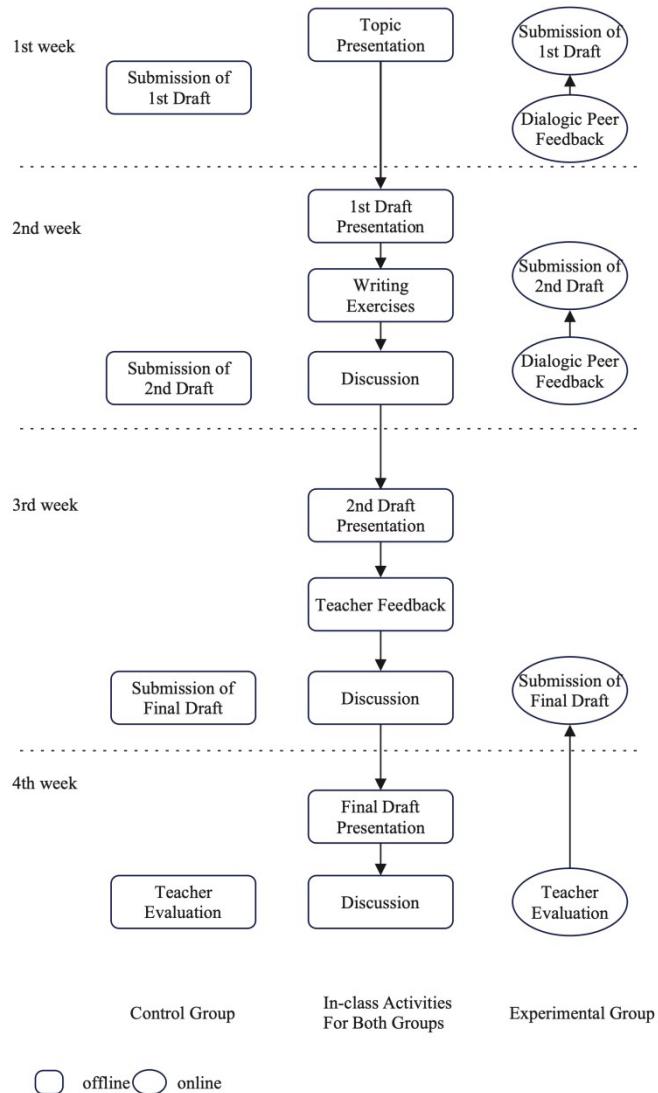


Figure 1 Writing cycle

A total of 63 Students from both groups produced 3 drafts over a writing cycle which consisted of 4 weeks with one class of 90 minutes per week, except that students in the experimental group needed to upload their writings online and conduct dialogic peer feedback in the process as well. Those 31 students were assigned randomly to provide their feedback on at least one piece of writing so as to prevent bias resulting from friendship (Saito & Fujita, 2004; Wang, 2014). In addition, to enable students to upload, edit, share their writings as well as offer feedback to their peers throughout each writing cycle, an online document collaboration platform, Kdocs was employed. As a Chinese equivalent to Google Docs, Kdocs allows all students with a permission to access to the same document, leave comments and even exchange ideas instantly.

In terms of the guided dialogic peer feedback, students from the experimental group were asked to provide feedback to each draft under the guidance framework (see Table 1) adapted by Nelson and Schunn (2009) and Er et al. (2021). A sample of GDPF can be seen in Appendix A. In the process, students requested to have their real names revealed so that they could conduct further offline discussion.

Table 1
Guidance framework for dialogic peer feedback

	Feedback Providers	Feedback Recipients
Before First Drafts		1. Create writing goals. 2. Create action plans.
First Drafts to Final Drafts	1. Provide summary of the feedback provider's perception on the writing performance (including a tentative score based on the scoring rubric). 2. Provide location of the writing problems (on content, organization, and language use of the essays). 3. Provide possible solutions to the problems. 4. Exchange ideas concerning feedback with feedback recipients.	1. Make revisions based on the feedback. 2. Exchange ideas concerning feedback with feedback providers.
After Final Drafts		1. Make reflections upon the writing cycle.

To sum up, all students from both groups received the same in-class instruction. In terms of roles, students in the control group functioned as writers only while students in the experimental group functioned as both writers and reviewers.

Table 2
Activities for the experimental group during one writing cycle

Time	Contents	Online	Onsite
1 st Week	Topic presentation by teacher		•
	First drafts by students	•	
	Guided dialogic peer feedback	•	
2 nd Week	Presentation of first drafts by students		•
	Discussion by students and teacher		•
	Writing exercises		•
	Second drafts by students	•	
	Guided dialogic peer feedback	•	
3 rd Week	Presentation of second drafts by students		•
	Discussion by students and teacher		•
	Final drafts by students	•	
	Feedback by teacher	•	
4 th Week	Presentation of final drafts by students		•
	Discussion by students and teacher		•
	Evaluation by teacher	•	

After treatment

On Week 18, 60-minute post-tests were administered to both groups and the scores were collected. The scores from pre- and post-tests were analyzed for accessing and comparing the writing performance of the two groups to answer the first research question.

For students from the experimental group, the rest 30 minutes were spent on GDPFQuest and extra 60 minutes were used for semi-structured interviews. 9 students selected from the experimental group participated in the interviews. Following McIntosh & Morse (2015), variable strategy that involved participants representing the whole domain could be employed to select participants. As a result, the 9 participants were selected according to the improvement (in terms of score gains) they made after the treatment: 3 participants with the least improvement, 3 with the most improvement, and 3 with medium improvement. Descriptive statistics (means, standard deviation and proportion) were collected from the GDPFQuest to respond to the second research question. Students' responses from the semi-structured interviews were transcribed and collected as qualitative data for figuring out students' perception towards the new instruction as well as triangulating findings from the questionnaire.

Data analyses

Analyzing quantitative data

Since the normal distribution and homogeneity of data is the prerequisite for the parametric tests (t-test and ANCOVA) employed in the current study, skewness and kurtosis values as well as results from Levene's tests were first checked. Then, independent t-tests were run to compare two groups' pre-test means and post-test means. Paired samples t-tests were then run to investigate the effects of the traditional and the GDPF on students' writing performance. To achieve this, the study meticulously examined the results from pre-tests and post-tests of students in both the experimental and control groups to assess their progress.

If there were any pre-existing differences to be found, one-way between-groups analyses of covariance (ANCOVA) (Pallant, 2020) would be run to further compare the differences between the traditional instruction and the new instruction in developing students' writing performance. Scores from post-tests were compared while scores from pre-tests were treated as covariate. For all analyses, the alpha level was set at .05. Finally, descriptive statistics were used in analyzing GDPFQuest and interpreting participants' perception towards the GDPF.

Analyzing qualitative data

Thematic analysis (Boyatzis, 1998) were employed to analyze data from the semi-structured interviews. To make certain that the participants' own ideas and viewpoints were captured and were not constrained by the researcher's own intentions and expertise, member checking was employed to verify the trustworthiness of the interview results. The interview transcript was returned to the interviewers and they checked the accuracy of their interview.

FINDINGS

Data from the study suggested that the treatment, i.e., the GDPF, was beneficial to improving participants' writing performance and there was positive perception of the instruction.

Answering the first research question

Research question 1: Does the Guided Dialogic Peer Feedback-Based Writing Instruction (GDPF) in an integrated blended learning environment improve the participants' development of writing performance? If so, to what extent?

Before conducting each analysis, data normality and homogeneity were confirmed. An independent t-test was conducted to compare the pre-test scores between the experimental and control groups. The analysis revealed a statistically significant difference ($p = 0.001$, $t = 3.643$, mean difference = 0.405), indicating that participants in the two groups had different initial levels of augmentative writing proficiency prior to the treatment (see Table 3).

Table 3
Comparing means between two groups before treatment

Experimental Group	Control Group	T-Test Value
Mean	Mean	(<i>p</i> value)
4.452	4.047	3.643
(0.5378)	(0.3203)	(0.001)

Another independent t-test was performed to compare the post-test scores between the experimental and control groups. The results showed a highly significant difference ($p = 0.000$, $t = 6.624$, mean difference = 1.346), indicating that the experimental group exhibited a significantly greater improvement in writing performance compared to the control group after the treatment without taking initial writing ability difference into account (see Table 4).

Table 4
Comparing means between two groups after treatment

Experimental Group	Control Group	T-Test Value
Mean	Mean	(<i>p</i> value)
6.065	4.719	6.264
(0.9725)	(0.7177)	(0.000)

A paired t-test was used to evaluate the change in scores within the experimental group from pre-test to post-test. The analysis yielded a highly significant result ($p = 0.000$), with a mean difference of -1.613. This suggested a significant improvement in writing performance among participants who received the GDPF (see Table 5).

Table 5
Comparing means within experimental group before and after treatment

Before Treatment	After Treatment	T-Test Value
Mean	Mean	(<i>p</i> value)
4.452	6.065	-7.743
(0.5378)	(0.9725)	(0.000)

Similarly, another paired t-test was employed to assess the change in scores within the control group. The results were highly significant ($p = 0.000$), with a mean difference of -0.672. This indicated a significant enhancement in writing performance for participants in the control group as well (see Table 6).

Table 6
Comparing means within control group before and after treatment

Before Treatment	After Treatment	T-Test Value
Mean (SD)	Mean (SD)	(p value)
4.047 (0.3203)	4.719 (0.7177)	-5.162 (0.000)

To ascertain if the group differences identified in the t-test remained significant after controlling for initial writing proficiency, a one-way Analysis of Covariance (ANCOVA) was conducted. The ANCOVA incorporated pre-test scores as a covariate to adjust for initial differences in writing ability when comparing post-test scores between the experimental and control groups (see Table 7). The analysis revealed a p value of 0.871 for pre-test scores and a highly significant p value of 0.000 for the GDFP. This indicates that after accounting for initial difference in writing ability, the GDFP had a substantial impact on post-test scores.

Table 7
Comparing means between groups after controlling for initial writing difference

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	20.121	1	20.121	27.239	.000
Pre-Scores	.020	1	.020	.026	.871
Treatment	23.998	1	23.998	32.488	.000
Error	44.320	60	.739		

The results clearly indicate that the experimental group, which received the GDFP experienced a significantly greater improvement in writing performance compared to the control group.

To gain a deeper insight into the differences in writing performance over time due to the treatment, Table 8 presents the mean scores adjusted for initial writing ability, as calculated by the ANCOVA. Figure 2 graphically depicts the mean comparisons of writing performance between the pre-test and post-test across the two groups. Within the figure, individual lines trace the trajectory of adjusted mean scores from the pre-test to the post-test for each group. Specifically, the solid line denotes the experimental group's scores, and the dashed line corresponds to the control group's scores. A closer inspection of Figure 2 reveals that the experimental group outperformed the control group in writing proficiency. It is noteworthy that the experimental group's scores improved significantly more than those of the control group, with a positive differential of approximately 1.621 points compared to 0.664 points, respectively. The findings from the ANCOVA analysis further support the superiority of the GDFP intervention over traditional teaching methods employed in the control group.

Table 8
Comparing means between two groups after controlling for initial writing difference

Experimental Group	Control Group	F-Test Value
Adjusted Mean (Standard Error)	Adjusted Mean (Standard Error)	(<i>p</i> value)
6.073 (0.163)	4.711 (0.160)	32.488 (0.000)

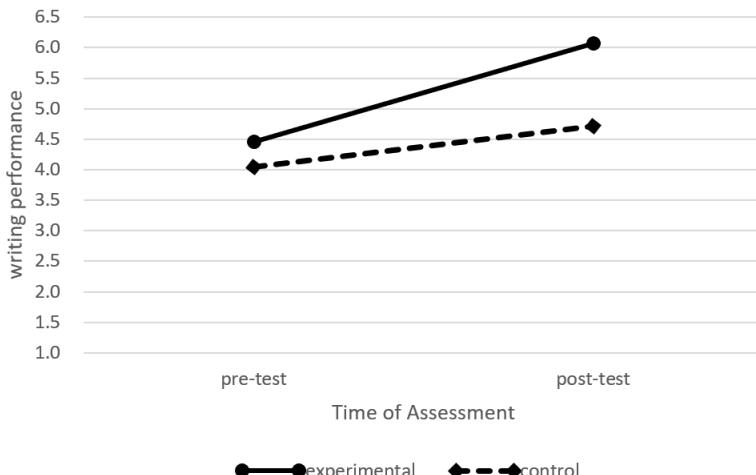


Figure 2 Comparing the change in students' writing performance from pre- to post-test between two groups

These results provide robust evidence for the effectiveness of Guided Dialogic Peer Feedback-Based Writing Instruction (GDPF) in enhancing participants' writing proficiency within an integrated blended learning environment. The study highlights the importance of integrating GDPF strategies into writing instruction for more effective skill development.

Answering the second research question

Research question 2: How do the participants perceive the Guided Dialogic Peer Feedback-Based Writing Instruction (GDPF) in an integrated blended learning environment?

The study aimed to investigate participants' perceptions of the Guided Dialogic Peer Feedback-Based Writing Instruction (GDPF) in an integrated blended learning environment. The findings were based on a comprehensive analysis of questionnaire responses and interview codings, providing a triangulated view of the participants' experiences. To maintain the anonymity of the participants, their real names were replaced with the capitalized letter S plus one random number ranging from 1-9.

According to the GDPFQuest, participants exhibited a predominantly positive perception towards the GDPF instruction (see Table 9). A mean value of 4.024 ($SD = 0.818$) showed the overall satisfaction with the new instruction.

Table 9
 Results from GDPFQuest

Question	Students' Responses									
	Strongly Agree		Agree		Not Sure		Disagree		Strongly Disagree	
	No.	%	No.	%	No.	%	No.	%	No.	%
1. I like receiving feedback from my partners.	9	29.03	15	48.39	7	22.58	0	0	0	0
2. My partners provide their feedback in a tactful way.	7	22.58	17	54.84	5	16.13	2	6.45	0	0
3. I think the feedback helped me to improve my writing.	11	35.48	17	54.84	2	6.45	1	3.23	0	0
4. The feedback I received was accurate and specific enough to improve my writing.	7	22.58	18	58.06	4	12.9	2	6.45	0	0
5. The feedback I received was helpful / valuable for improving my writing.	8	25.81	16	51.61	5	16.13	2	6.45	0	0
6. Thanks to the feedback I received, I was able to process / modify my work so that I improved my writing.	9	29.03	14	45.16	6	19.35	2	6.45	0	0
7. I enjoyed providing feedback to my partners.	14	45.16	13	41.91	3	9.68	1	3.23	0	0
8. I think the feedback that I have provided to my partners was well-received.	9	29.03	16	51.61	5	16.13	0	0	1	3.23
9. I thought about how to tactfully provide feedback to my partners.	12	38.71	17	54.84	2	6.45	0	0	0	0
10. I used my previous knowledge of writing to provide feedback.	7	22.58	13	41.94	9	29.03	2	6.45	0	0
11. I think my criticism of the work was precise / specific enough to help my partners to improve their writing.	6	19.35	14	45.16	8	25.81	3	9.68	0	0
12. I think the feedback I provided to my partners was useful and improved their writing.	5	16.13	13	41.94	10	32.26	3	9.68	0	0
13. I think providing and receiving feedback is useful for improving peer learning.	13	41.94	14	45.16	2	6.45	2	6.45	0	0
14. I think providing and receiving feedback has improved my motivation for writing.	10	32.26	14	45.16	6	19.35	1	3.23	0	0
15. I think that the feedback provided and received has improved my relationships with my partners.	9	29.03	17	54.84	4	12.9	1	3.23	0	0

To be specific, a substantial majority (77.42%) expressed their liking for receiving peer feedback. Additionally, 77.42% of participants felt that their peers provided feedback in a tactful manner, with 54.84% in agreement and 22.58% in strong agreement. This suggests that the feedback process was generally perceived as respectful and considerate. The majority of participants

(90.32%) believed that the feedback they received was instrumental in improving their writing. Among them, 54.84% agreed and 35.48% strongly agreed. This indicates that participants found the feedback to be a valuable tool for enhancing their writing skills.

Furthermore, 80.64% of participants agreed that the feedback provided to them was precise and detailed, effectively contributing to the improvement of their writing performance, with 58.06% in agreement and 22.58% in strong agreement. This indicated that the feedback provided by peers was perceived as constructive and actionable. In the same vein, some interviewed students shared this idea.

After peer evaluations, I often noticed problems I couldn't see on my own. (S8)

Participants were actively engaged in providing feedback to their peers. Nearly 87.1% expressed enjoyment in this activity, with 45.16% in strong agreement and 41.94% in agreement. This suggested that participants found value in the process of giving feedback. The majority of participants (80.64%) believed that the feedback they provided was well-received by their peers. Among them, 51.61% agreed and 29.03% strongly agreed. This indicated that participants felt their contributions were valuable and appreciated. Participants demonstrated a high level of consideration when providing feedback, with 93.55% indicating that they thought about how to tactfully deliver their comments. Of these, 54.84% agreed and 38.71% strongly agreed. This suggests that participants were conscious of maintaining a constructive and supportive feedback environment.

Participants acknowledged the cognitive benefits of providing and receiving feedback. A large majority (87.1%) believed that this practice was useful for enhancing peer learning, with 45.16% in agreement and 41.94% in strong agreement. This indicates a recognition of the educational value of the feedback process. Additionally, over three-quarters (77.42%) believed that providing and receiving feedback had improved their motivation for writing. Among them, 45.16% agreed and 32.26% strongly agreed. This suggested that participants perceived an increase in their intrinsic motivation to engage in writing tasks. Similarly, interviewees also reported higher motivation and engagement in writing tasks, attributing these improvements to the GDFP approach.

I feel more proactive in exploring different topics for writing. (S4)

My motivation has improved a bit because I used to be afraid of writing. Now, I feel more confident and logical. (S3)

A substantial number (83.87%) felt that the feedback provided and received had improved their relationships with their peers. Among them, 54.84% agreed and 29.03% strongly agreed. This indicated that participants perceived an enhancement in their collaborative learning experiences as a result of the feedback process. Likewise, some students voiced their gains from feedback exchanging.

We can see each other's strengths and areas for improvement, which the teacher might not have noticed. It's a great platform for mutual improvement. (S4)

Participants overwhelmingly favored the current GDPF over traditional teaching methods.

I feel that the current approach is more targeted because the feedback is more timely, and everyone's progress is visible on the platform. (S9)

I think the current approach is more effective because it pushes you to write regularly and respond to feedback, whether it's from classmates or teachers. (S1)

They identified benefits such as increased time and effort invested in writing and revision, leading to improved learning outcomes and greater learner autonomy.

I still wrote and organized things on my own. However, I did seek additional resources for expansion, which I didn't do before. (S3)

Apart from the above-mentioned comments, students also mentioned their improved autonomy in their interviews.

I think my autonomy has improved a lot. If I don't write an essay, I feel like I'm not learning anything. (S6)

Speaking of the online platform, students expressed their support.

I think it's good because if we don't use digital documents, handwritten essays can be difficult to read, and teachers might struggle to understand them. (S1)

I find this platform very convenient. We can easily write and submit our essays. Teachers can easily review them without the need for physical papers. (S8)

Each round of work, including peer reviews and saving each version, allows me to review and maintain a record of my progress. (S9)

This triangulation of data from the questionnaires and interviews strengthened the validity of the results and provided a comprehensive understanding of participants' perceptions of the GDPF. The results indicated that participants perceive the Guided Dialogic Peer Feedback-Based Writing Instruction (GDPF) as a highly effective approach in an integrated blended learning environment. They valued the feedback process, finding it instrumental in improving their writing skills. Additionally, participants appreciated the collaborative nature of the instruction, which promotes learner autonomy, motivation, and engagement. The comparison with traditional teaching methods further supports the positive impact of the GDPF approach on participants' learning experiences.

DISCUSSION AND CONCLUSION

Discussion

The study examined the effects of Guided Dialogic Peer Feedback-Based Writing Instruction (GDPF) on the writing abilities of Chinese students learning English as a foreign language (EFL) within an integrated blended learning setting. The aim was to discern whether this innovative instructional approach could yield substantial improvements in participants' writing proficiency, compared to traditional teaching methods. The study also sought to shed light on the potential benefits of integrating GDPF strategies into writing instruction.

The results of this study provide robust evidence supporting the effectiveness of the GDPF in enhancing participants' writing proficiency within an integrated blended learning environment. This integration offers a departure from more traditional, instructor-centered approaches, placing a greater emphasis on peer collaboration and active participation. This finding aligns with previous research (Ng & Yu, 2021; Wood, 2021) emphasizing the benefits of peer feedback in writing instruction. The structured nature of the GDPF approach likely played a crucial role in helping students grasp and apply the feedback more effectively.

Participants in this study exhibited a markedly positive perception of the GDPF. They perceived it as a highly effective approach within the integrated blended learning environment. The appreciation for the feedback process indicates that students recognize its value as a catalyst for improving their writing skills and promoting learner autonomy, motivation, and sustained engagement. The opportunity for students to actively engage with their peers in the feedback process likely contributed to a more dynamic and participatory learning experience. This finding is also consistent with earlier research (Armengol-Asparó et al., 2020; Cui et al., 2021; H.-F. Cheng & Dörnyei, 2007; Vattøy et al., 2020; Weng et al., 2023).

Interestingly, participants requested to use their real names when receiving and giving online dialogic peer feedback, saying that it would allow them to discuss in details in person. Due to inadequate English proficiency and complexity of the writing issues, students would continue their discussion offline. This finding was consistent with preference of the non-anonymity of dialogue proposed by Schillings et al. (2021) and seemingly contradictory to the notion put forward by Saito and Fujita (2004), W. Wang (2014), and (Zhan et al., 2022).

In conclusion, the study's results provide compelling evidence for the effectiveness of the GDPF in improving writing proficiency in an integrated blended learning environment. The structured nature of the GDPF, coupled with its emphasis on peer collaboration, yielded positive outcomes. Integrating the GDPF into writing instruction holds promise for future educational contexts and presents a significant stride towards more dynamic and effective pedagogical approaches.

Conclusion

The findings of this study offered substantial and compelling evidence regarding the efficacy of Guided Dialogic Peer Feedback-Based Writing Instruction (GDPF) in significantly augmenting

the writing proficiency of participants within an integrated blended learning environment. This substantiated the crucial role of integrating GDFP strategies into writing instruction for a more fruitful development of skills. This assertion opens up avenues for future research to explore the enduring effects and potential adaptability of the GDFP in diverse educational settings.

Furthermore, the triangulation of data, involving insights from questionnaires, interviews, bolstered the credibility of the findings and provides a comprehensive and detailed comprehension of how participants perceive and engage with the GDFP.

It is noteworthy that participants distinctly recognized the GDFP as a highly effective approach within the integrated blended learning environment. They attributed considerable value to the feedback process, viewing it as instrumental in refining their writing skills. Moreover, they expressed a strong affinity for the collaborative nature of the instruction, which not only fostered learner autonomy but also ignited motivation and sustained engagement. When contrasted with conventional teaching methods, coupled with the additional insights gleaned from the questionnaires, the affirmative impact of the GDFP on participants' learning experiences was further substantiated.

At the pedagogical level, the findings offer additional empirical insights into leveraging guided dialogic peer feedback to improve students' motivation for writing in the future. Firstly, educators should intentionally cultivate teaching practices attuned to incorporating guided dialogic peer feedback activities as part of writing instruction. This will establish a more nurturing classroom environment, thereby optimizing students' learning potential. Secondly, this study advocates for university administrators to give heed to peer collaboration. They should consider integrating appropriate utilization of dialogic peer feedback and other collaborative strategies into teacher evaluation criteria. Thirdly, those involved in teacher education should augment the awareness of novice teachers regarding the essential role of dialogic peer feedback in writing. Pedagogical approaches like peer feedback should be included in the training of novice educators, equipping them to address potential demotivation among students.

However, it is crucial to acknowledge several limitations within this study, some of which can be rectified through future research endeavors. Firstly, one must approach the findings of this study with caution due to their constrained applicability, primarily stemming from the small population of students studying in an independent college in China, as well as the reliance on self-reported data. Subsequent research could extend investigations to diverse contexts and academic tiers to dig deeper into the effects of dialogic peer feedback. Secondly, the research design implemented in this study facilitated the observation of the effects of guided dialogic peer feedback within a constrained time frame. Future research could extend this temporal scope to assess the sustained effects of dialogic peer feedback on L2 writing proficiency over a longer duration. Thirdly, subsequent investigations might benefit from the inclusion of observational data, which would allow researchers to meticulously document and analyze students' interactions with peer feedback, thereby enabling a more comprehensive and objective evaluation. Future research might consider integrating students' critical thinking abilities, recognizing that varying critical thinking levels may influence the degree to which guided dialogic peer feedback can enhance writing performance.

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REFERENCES

Aborisade, P. A. (2013). Blended learning in English for academic purposes courses: A Nigerian case study. In B. Tomlinson & C. Whittaker (Eds.), *Blended learning in English language teaching: Course design and implementation* (pp. 35–41). British Council.

Adas, D., & Bakir, A. (2013). Writing difficulties and new solutions: Blended learning as an approach to improve writing abilities. *International Journal of Humanities and Social Science*, 3(9), 254–266.

Ajjawi, R., & Boud, D. (2017). Researching feedback dialogue: An interactional analysis approach. *Assessment & Evaluation in Higher Education*, 42(2), 252–265. <https://doi.org/10.1080/02602938.2015.1102863>

Armengol-Asparó, C., Mercader, C., & Ion, G. (2020). Making peer-feedback more efficient: What conditions of its delivery make the difference? *Higher Education Research & Development*, 41(2), 226–239. <https://doi.org/10.1080/07294360.2020.1840527>

Baresh, E. F. (2022). Developing Libyan undergraduates' writing skills through reflective journaling: A critical literature review. *Journal of English Language Teaching and Learning*, 3(1), 27–35. <https://doi.org/10.33365/jeltl.v3i1.1835>

Boelens, R., De Wever, B., & Voet, M. (2017). Four key challenges to the design of blended learning: A systematic literature review. *Educational Research Review*, 22, 1–18. <https://doi.org/10.1016/j.edurev.2017.06.001>

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Sage.

Cañabate, D., Nogué, L., Serra, T., & Colomer, J. (2019). Supportive peer feedback in tertiary education: Analysis of pre-service teachers' perceptions. *Education Sciences*, 9(4), Article 280. <https://doi.org/10.3390/educsci9040280>

Carrillo, C., & Flores, M. A. (2020). COVID-19 and teacher education: A literature review of online teaching and learning practices. *European Journal of Teacher Education*, 43(4), 466–487. <https://doi.org/10.1080/02619768.2020.1821184>

Chen, W. S., & Yao, A. Y. T. (2016). An empirical evaluation of critical factors influencing learner satisfaction in blended learning: A pilot study. *Universal Journal of Educational Research*, 4(7), 1667–1671.

Cheng, H.-F., & Dörnyei, Z. (2007). The use of motivational strategies in language instruction: The case of EFL teaching in Taiwan. *International Journal of Innovation in Language Learning and Teaching*, 1(1), 153–174. <https://doi.org/10.2167/illt048.0>

Cho, K., & MacArthur, C. (2011). Learning by reviewing. *Journal of Educational Psychology*, 103(1), 73–84. <https://doi.org/10.1037/a0021950>

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Sage.

Cui, Y., Schunn, C. D., Gai, X., Jiang, Y., & Wang, Z. (2021). Effects of trained peer vs. teacher feedback on EFL students' writing performance, self-efficacy, and internalization of motivation. *Frontiers in Psychology*, 12, Article 788474. <https://doi.org/10.3389/fpsyg.2021.788474>

Du, M., & Ma, M. X. (2013). The effect of feedback modes on non-English major's writing accuracy in an EFL context. *Foreign Language and Literature*, 29(1), 150–153.

Er, E., Dimitriadis, Y., & Gašević, D. (2021). Collaborative peer feedback and learning analytics: Theory-oriented design for supporting class-wide interventions. *Assessment and Evaluation in Higher Education*, 46(2), 169–190. <https://doi.org/10.1080/02602938.2020.1764490>

Feng, A., & Adamson, B. (2019). Language policies in education in the People's Republic of China. In A. Kirkpatrick & A. J. Liddicoat (Eds.), *The Routledge international handbook of language education policy in Asia* (pp. 45–59). Routledge.

Filius, R. M., de Kleijn, R. A., Uijl, S. G., Prins, F. J., van Rijen, H. V., & Grobbee, D. E. (2018). Strengthening dialogic peer feedback aiming for deep learning in SPOCs. *Computers & Education*, 125, 86–100. <https://doi.org/10.1016/j.compedu.2018.06.004>

Gadd, M., & Parr, J. M. (2017). Practices of effective writing teachers. *Reading and Writing*, 30(7), 1551–1574. <https://doi.org/10.1007/s11145-017-9737-1>

Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs* (pp. 3–21). Pfeiffer Publishing.

Graham, S. (2019). Changing how writing is taught. *Review of Research in Education*, 43(1), 277–303. <https://doi.org/10.3102/0091732X18821125>

Graham, S., & Alves, R. A. (2021). Research and teaching writing. *Reading and Writing*, 34, 1613–1621. <https://doi.org/10.1007/s11145-021-10188-9>

Greenberg, K. P. (2015). Rubric use in formative assessment: A detailed behavioral rubric helps students improve their scientific writing skills. *Teaching of Psychology*, 42(3), 211–217. <https://doi.org/10.1177/0098628315587618>

Güzer, B., & Caner, H. (2014). The past, present and future of blended learning: An in depth analysis of literature. *5th World Conference on Educational Sciences*, 116, 4596–4603. <https://doi.org/10.1016/j.sbspro.2014.01.992>

Hains-Wesson, R., McKenzie, S., & Bangay, S. (2015). *Anytime and anywhere: A case study for blended learning*. Educause Review. <https://er.educause.edu/articles/2015/7/anytime-and-anywhere-a-case-study-for-blended-learning>

Hewett, B. L. (2000). Characteristics of interactive oral and computer-mediated peer group talk and its influence on revision. *Computers and Composition*, 17(3), 265–288. [https://doi.org/10.1016/S8755-4615\(00\)00035-9](https://doi.org/10.1016/S8755-4615(00)00035-9)

Hilliard, L. P., & Stewart, M. K. (2019). Time well spent: Creating a community of inquiry in blended first-year writing courses. *The Internet and Higher Education*, 41, 11–24. <https://doi.org/10.1016/j.iheduc.2018.11.002>

Hosseinpour, N., Biria, R., & Rezvani, E. (2019). Promoting academic writing proficiency of Iranian EFL learners through blended learning. *Turkish Online Journal of Distance Education*, 20(4), 99–116. <https://doi.org/10.17718/tojde.640525>

Hrastinski, S. (2019). What do we mean by blended learning? *TechTrends*, 63(5), 564–569. <https://doi.org/10.1007/s11528-019-00375-5>

Huang, S., & Renandya, W. A. (2020). Exploring the integration of automated feedback among lower-proficiency EFL learners. *Innovation in Language Learning and Teaching*, 14(1), 15–26. <https://doi.org/10.1080/17501229.2018.1471083>

Hyland, K. (2019). *Second language writing*. Cambridge University Press.

Kaufmann, R., & Vallade, J. I. (2020). Exploring connections in the online learning environment: Student perceptions of rapport, climate, and loneliness. *Interactive Learning Environments*, 30(10), 1794–1808. <https://doi.org/10.1080/10494820.2020.1749670>

Lee, I. (2014). Revisiting teacher feedback in EFL writing from sociocultural perspectives. *Tesol Quarterly*, 48(1), 201–213. <https://doi.org/10.1002/tesq.153>

Liu, M. (2013). Blended learning in a university EFL writing course: Description and evaluation. *Journal of Language Teaching & Research*, 4(2), 301–309. <https://doi.org/10.4304/jltr.4.2.301-309>

Lopez-Pellisa, T., Rotger, N., & Rodriguez-Gallego, F. (2021). Collaborative writing at work: Peer feedback in a blended learning environment. *Education and Information Technologies*, 26(1), 1293–1310. <https://doi.org/10.1007/s10639-020-10312-2>

Mahmoudi, F., & Bugra, C. (2020). The effects of using rubrics and face to face feedback in teaching writing skill in higher education. *International Online Journal of Education and Teaching*, 7(1), 150–158.

McDonough, K., De Vleeschauwer, J., & Crawford, W. (2018). Comparing the quality of collaborative writing, collaborative prewriting, and individual texts in a Thai EFL context. *System*, 74, 109–120. <https://doi.org/10.1016/j.system.2018.02.010>

McIntosh, M. J., & Morse, J. M. (2015). Situating and constructing diversity in semi-structured interviews. *Global Qualitative Nursing Research*, 2, Article 597674. <https://doi.org/10.1177/2333393615597674>

Meek, S. E., Blakemore, L., & Marks, L. (2017). Is peer review an appropriate form of assessment in a MOOC? Student participation and performance in formative peer review. *Assessment & Evaluation in Higher Education*, 42(6), 1000–1013. <https://doi.org/10.1080/02602938.2016.1221052>

Murray, N., Liddicoat, A. J., Zhen, G., & Mosavian, P. (2023). Constraints on innovation in English language teaching in hinterland regions of China. *Language Teaching Research*, 27(5), 1246–1267. <https://doi.org/10.1177/1362168820979855>

Nelson, M. M., & Schunn, C. D. (2009). The nature of feedback: How different types of peer feedback affect writing performance. *Instructional Science*, 37(4), 375–401. <https://doi.org/10.1007/s11251-008-9053-x>

Ng, W. S., & Yu, G. (2021). The impacts of dialogic interaction to engage students in peer assessment. *The Asia-Pacific Education Researcher*, 32, 53–64. <https://doi.org/10.1007/s40299-021-00633-2>

Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199–218. <https://doi.org/10.1080/03075070600572090>

Noroозی, O., Biemans, H., & Mulder, M. (2016). Relations between scripted online peer feedback processes and quality of written argumentative essay. *The Internet and Higher Education*, 31, 20–31. <https://doi.org/10.1016/j.iheduc.2016.05.002>

Noroозی, O., Hatami, J., Bayat, A., van Ginkel, S., Biemans, H. J. A., & Mulder, M. (2020). Students' online argumentative peer feedback, essay writing, and content learning: Does gender matter? *Interactive Learning Environments*, 28(6), 698–712. <https://doi.org/10.1080/10494820.2018.1543200>

Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge.

Pardo, A., Jovanovic, J., Dawson, S., Gašević, D., & Mirriahi, N. (2019). Using learning analytics to scale the provision of personalised feedback. *British Journal of Educational Technology*, 50(1), 128–138. <https://doi.org/10.1111/bjet.12592>

Pond, K., Ul-Haq, R., & Wade, W. (1995). Peer review: A precursor to peer assessment. *Innovations in Education and Training International*, 32(4), 314–323. <https://doi.org/10.1080/1355800950320403>

Pop, A., & Slev, A. M. (2012). Maximizing EFL learning through blending. *Procedia-Social and Behavioral Sciences*, 46, 5516–5519. <https://doi.org/10.1016/j.sbspro.2012.06.467>

Portney, L. G., & Watkins, M. P. (2009). *Foundations of clinical research: Applications to practice* (Vol. 892). Pearson/Prentice Hall.

Ren, J. (2017). College English writing instruction for non-English majors in Mainland China: The "Output-driven, Input-enabled" hypothesis perspective. *English Language Teaching*, 10(7), 150–157. <https://doi.org/10.5539/elt.v10n7p150>

Rovai, A. P., & Jordan, H. M. (2004). Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses. *International Review of Research in Open and Distributed Learning*, 5(2), Article 192. <https://doi.org/10.19173/irrodl.v5i2.192>

Sahni, J. (2019). Does blended learning enhance student engagement? Evidence from higher education. *Journal of E-Learning and Higher Education*, 2019, 1–14. <https://doi.org/10.5171/2019.121518>

Saito, H., & Fujita, T. (2004). Characteristics and user acceptance of peer rating in EFL writing classrooms. *Language Teaching Research*, 8(1), 31–54. <https://doi.org/10.1191/1362168804lr133oa>

Schillings, M., Roeberstsen, H., Savelberg, H., van Dijk, A., & Dolmans, D. (2021). Improving the understanding of written peer feedback through face-to-face peer dialogue: Students' perspective. *Higher Education Research & Development*, 40(5), 1100–1116. <https://doi.org/10.1080/07294360.2020.1798889>

Sejdiu, S. (2014). English language teaching and assessment in blended learning. *Journal of Teaching and Learning with Technology*, 3(2), 67–82. <https://doi.org/10.14434/jotlt.v3n2.5043>

So, L., & Lee, C. H. L. (2012). Peer feedback using blended learning in L2 writing at the university level. *English Teaching*, 67(3), 307–337.

Staker, H., & Horn, M. B. (2012). *Classifying K-12 blended learning*. Innosight Institute. <http://www.christenseninstitute.org/wp-content/uploads/2013/04/Classifying-K-12-blended-learning.pdf>

Steen-Utheim, A., & Wittek, A. L. (2017). Dialogic feedback and potentialities for student learning. *Learning, Culture and Social Interaction*, 15, 18–30. <https://doi.org/10.1016/j.lcsi.2017.06.002>

Stein, J., & Graham, C. R. (2014). Essentials for blended learning: A standards-based guide. Routledge.

Subramaniam, S. R., & Muniandy, B. (2019). The effect of flipped classroom on students' engagement. *Technology, Knowledge and Learning*, 24(3), 355–372. <https://doi.org/10.1007/s10758-017-9343-y>

Sun, W., & Rong, X. L. (2021). English education reform in Asian countries. In *Oxford research encyclopedia of education*. Oxford Research Encyclopedias. <https://doi.org/10.1093/acrefore/9780190264093.013.838>

Tuzi, F. (2004). The impact of e-feedback on the revisions of L2 writers in an academic writing course. *Computers and Composition*, 21(2), 217–235. <https://doi.org/10.1016/j.compcom.2004.02.003>

Valero Haro, A., Noroozi, O., Biemans, H. J. A., & Mulder, M. (2019). The effects of an online learning environment with worked examples and peer feedback on students' argumentative essay writing and domain-specific knowledge acquisition in the field of biotechnology. *Journal of Biological Education*, 53(4), 390–398. <https://doi.org/10.1080/00219266.2018.1472132>

Van Popta, E., Kral, M., Camp, G., Martens, R. L., & Simons, P. R.-J. (2017). Exploring the value of peer feedback in online learning for the provider. *Educational Research Review*, 20, 24–34. <https://doi.org/10.1016/j.edurev.2016.10.003>

Vattøy, K.-D., Gamlem, S. M., & Rogne, W. M. (2020). Examining students' feedback engagement and assessment experiences: A mixed study. *Studies in Higher Education*, 46(11), 2325–2337. <https://doi.org/10.1080/03075079.2020.1723523>

Wang, W. (2014). Students' perceptions of rubric-referenced peer feedback on EFL writing: A longitudinal inquiry. *Feedback in Writing: Issues and Challenges*, 19, 80–96. <https://doi.org/10.1016/j.asw.2013.11.008>

Watson, J. (2008). Blended learning: The convergence of online and face-to-face education. *Promising practices in online learning*. North American Council for Online Learning.

Weir, J. P. (2005). Quantifying test-retest reliability using the intraclass correlation coefficient and the SEM. *The Journal of Strength & Conditioning Research*, 19(1), 231–240.

Wen, Q. F. (2005). A critique of the length approach. *Modern Foreign Languages*, 3, 308–311.

Weng, F., Ye, S. X., & Xue, W. (2023). The effects of peer feedback on L2 students' writing motivation: An experimental study in China. *The Asia-Pacific Education Researcher*, 32(4), 473–483. <https://doi.org/10.1007/s40299-022-00669-y>

Winstone, N. (2019). Facilitating students' use of feedback: Capturing and tracking impact using digital tools. In M. Henderson, R. Ajjawi, D. Boud & E. Molloy (Eds.), *The impact of feedback in higher education* (pp. 225–242). Springer International Publishing.

Wong, L., Tatnall, A., & Burgess, S. (2014). A framework for investigating blended learning effectiveness. *Education & Training*, 56(2/3), 233–251. <https://doi.org/10.1108/ET-04-2013-0049>

Wood, J. (2021). Making peer feedback work: The contribution of technology-mediated dialogic peer feedback to feedback uptake and literacy. *Assessment and Evaluation in Higher Education*, 47(3), 327–346. <https://doi.org/10.1080/02602938.2021.1914544>

Yang, M., Badger, R., & Yu, Z. (2006). A comparative study of peer and teacher feedback in a Chinese EFL writing class. *Journal of Second Language Writing*, 15(3), 179–200. <https://doi.org/10.1016/j.jslw.2006.09.004>

Yoon, S. Y. (2011). Students' reflection on feedback in L2 writing in blended learning. *Multimedia Assisted Language Learning*, 14(2), 235–261.

Yu, S. (2021). Feedback-giving practice for L2 writing teachers: Friend or foe? *Journal of Second Language Writing*, 52, Article 100798. <https://doi.org/10.1016/j.jslw.2021.100798>

Zeng, J., Ponce, A. R., & Li, Y. (2023). English linguistic neo-imperialism in the era of globalization: A conceptual viewpoint. *Frontiers in Psychology*, 14, Article 1149471. <https://doi.org/10.3389/fpsyg.2023.1149471>

Zhan, Y., Wan, Z. H., & Sun, D. (2022). Online formative peer feedback in Chinese contexts at the tertiary Level: A critical review on its design, impacts and influencing factors. *Computers & Education*, 176, Article 104341. <https://doi.org/10.1016/j.compedu.2021.104341>

Zhang, B. (2020). Application of flipped classroom in college English teaching of Chinese undergraduate students majoring in arts and physical education. In *Proceedings of the 2020 conference on education, language and inter-cultural communication (ELIC 2020)* (pp. 188–190). Atlantis Press. <https://doi.org/10.2991/assehr.k.201127.037>

Zhang, Z. (2019). The strategies of college English writing. *Sino-US English Teaching*, 16(5), 203–208. <https://doi.org/10.17265/1539-8072/2019.05.003>

Zhu, Q., & Carless, D. (2018). Dialogue within peer feedback processes: Clarification and negotiation of meaning. *Higher Education Research & Development*, 37(4), 883–897. <https://doi.org/10.1080/07294360.2018.1446417>

Appendix A

Sample of dialogic peer feedback

 等 3 人编辑 | 05-08 更新

评论 (18) 

My Goal:

- a. write more than two example.
- b. clearer point of view.
- c. fewer grammar errors.

The first edition:

Recently, whether artificial intelligence will make human brain lazy has aroused heated debate in society. Development of intelligent machines will surpass human ability and make people stupid. I don't agree with the expert. I think it will improve professional specialization and help people acquire knowledge faster.

Firstly, intelligent machines can eliminate low-level jobs in industry. For example, ChatGPT can translation commercial contracts and improve them countless times in short time. But it still can't finish literary translation, which is considered high-level translation. Because it are included many humans' consciousness, and intelligent machines could never understand human mind through programs. Secondly, intelligent machines help people acquire knowledge faster. For example, AlphaGo has prompted popularization of chess artificial intelligence, human can play chess with it in website to learn chess, which can be taught timely and quickly. Through AlphaGo has peaked at chess, human thought process is irreplaceable.

Finally, intelligent machines replace repetitive low-level labor and promotes occupational specialization, also, it makes learning way of human is more convenient to help people think. I don't agree with the expert, intelligent machines can't make people's brain lazy. In contradiction between humanbeings and development of intelligent machines, human should take initiative to make intelligent machine always used by human.

The second edition:

Artificial intelligence may make human brain lazy. I don't agree with the expert that development of intelligent machines will surpass human ability and make people stupid. I think it will improve professional specialization and promote human thinking expeditiously.

Firstly, intelligent machines can eliminate low-level jobs in industry. A case in point is ChatGPT can translation commercial contracts and improve them countless times in short time. But it still can't finish literary translation, which is considered high-level translation. Because it are included many humans' consciousness, and intelligent machines could never understand human mind through programs. Secondly, intelligent machines help people acquire knowledge conveniently. For example, AlphaGo has prompted popularization of chess artificial intelligence. now human can play chess with it in website

Recently, whether artificial int...

 04-02 18:01 编辑过

7 The article has a clear point of view and clear thinking. The argument is powerful. post certain examples to clarify the opinion.



I think it will improve professi...

 04-02 17:58
post opinion

Firstly, intelligent machines c...

 04-02 18:04
use examples to demonstrate technology is useful for human

Finally, intelligent machines re...

 04-02 18:03
reiterate again the opinion

 04-02 23:47
thanks for your comment, I will try to improve it

popularization of chess artificial intelligence, now human can play chess with it in website to learn chess, even busy workers learn it in mere free time to enhance their ability to think beyond their careers. In the contrast, they hesitate to think another aspects of knowledge after working hours, without convenient and efficient artificial intelligence learning way.

On the whole, intelligent machines replace repetitive low-level labor and promotes occupational specialization, also, it makes learning way of human is more convenient to help people think. I don't approve of the expert opinion, intelligent machines can't make people's brain lazy.

The third edition:

Recently, Artificial intelligence may make human brain lazy have triggered social discussions. I don't agree with the expert that development of intelligent machines will surpass human ability and make people stupid. On the contrary, I think it will improve professional specialization and enhance people's ability to discriminate information.

Firstly, intelligent machines can eliminate low-level jobs in industry. A case in point is ChatGPT can translate commercial contracts while improving countless times in short time. But it still can't finish high-level translation, such as literary translation, which contains many humans' consciousness that intelligent machines could never understand through programs. Hence, people have to enhance learning intensity and pursue more complex thinking, because they can't rely on repeat and low-level thinking jobs to earn their living.

Secondly, intelligent machines prompt people to improve resolving ability. Intelligent machines collect information from internet to generate answers, but these mustn't whole right. When people are looking for correct answers, they have to keep thinking and develop resolving ability naturally. On the other hand, which also shows intelligent machines can't do really thinking, and always under control of programmed programs.

On the whole, intelligent machines replace repetitive and low-level operating positions to force people to chase high-level thinking, also, enhance discrimination of people during constant thinking. I disagree with the expert, intelligent machines can't make people's brain lazy.

6

you've made great progress. please try to avoid grammatical mistakes .

Reflection

I have mastered basic writing progress and knew how to design essay correctly. At the same time, I find when I try to put forward my point into specific, I can't organize my expression usefully and write unconvincing words firstly. Obviously, I often have grammatical mistakes, and I should correct it afterward.

FTC 1107



04-02 23:49

I use "appeal for action" to add more words, but it seems to make the ending too long



04-09 16:49

8 The article has a clear point of view and clear thinking. The argument is powerful. post certain examples to clarify the opinion. And I can get your point easily!!!!



04-09 16:50

post your opinion directly



04-09 16:50

A case in point is

excellent!



04-09 16:52

For example, AlphaGo has pr... put an example to clarify your point of view, it is clearly



04-09 16:56

On the whole, intelligent mac... reiterate again the opinion, highlight your point-