

Exploring the Impact of Online Peer Assessment Modules on the Feedback for English Writing by Chinese High School Students

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Abstract: This study examines the impact of online text and voice peer assessment modules on English writing feedback and learners' attitudes. One hundred students were paired to complete peer assessments for two writing tasks using the voice module of Microsoft Teams and the text module of QQ. The feedback was categorized into five types: identifying problems, explaining issues, proposing solutions, giving suggestions, and offering praise. The results indicate that text-based peer assessments primarily focused on identifying problems and errors, while voice-based assessments were more likely to propose solutions, give suggestions, and offer praise. Overall, learners had a positive attitude towards online peer assessment but preferred the text module, finding it more effective for improving writing. This study offers new insights into enhancing the effectiveness of online peer assessments and promoting students' writing skills.

Keywords: Online Peer Assessment, English Writing, Online Text Module, Online Voice Module.

1. Introduction

Peer assessment, a key method in second language writing classrooms, has garnered significant attention from researchers[1]. It enhances creativity, critical thinking, and self-directed learning[2]. Research shows that peer assessment boosts student engagement, motivation, and participation, while shifting learning responsibility to students[3]. It encourages careful writing, confidence, active participation, and self-reflection[4]. Moreover, it improves social skills, ownership, responsibility, negotiation skills, and teamwork, transforming passive learning into active learning and increasing student interest[5].

The use of Web 2.0 authoring tools and information technology has diversified peer assessment methods, offering excellent opportunities for collaboration and interactive learning[6]. These tools simplify creating and sharing text, making the process more engaging. Online peer assessment through text or voice provides a relaxed environment with more interaction than traditional methods, enhancing writing interest, expressive abilities, and quality[7]. While research has increasingly focused on the impact of different types of peer feedback, most studies have centered on text-based, one-way peer assessment, with little exploration of voice feedback or comparative studies in dialogic environments[8]. This study aims to compare the impact of text and voice peer assessment modules on feedback types, offering insights for practical application and further research.

2. Literature Review

Peer assessment involves students evaluating each other's work based on specific criteria[9], assessing and judging their peers' learning activities and achievements[10]. Rooted in Vygotsky's (1978) sociocultural theory, peer assessment aligns with the concept of the Zone of Proximal Development (ZPD). Within the ZPD, meaningful peer discussions and idea exchanges facilitate language acquisition and writing skill development[11]. As both peers provide and receive assistance, they collaboratively learn and improve their

revision techniques[12].

With the continuous development and application of technology in writing classrooms, computer-mediated communication (CMC) for peer feedback has seen increasing practice and research over the past few decades[13]. The peer assessment module based on CMC allows students to break free from temporal and spatial constraints, enabling them to engage in communication and feedback outside the classroom[14]. In recent years, there has been growing attention in China on research into online peer assessment, yielding valuable research outcomes[15].

Peer feedback in peer assessment is a key area of research in online education. Nelson & Schunn identified five types of peer feedback: summarization, feedback specificity, explanations, scope, and affective language[16]. Wu & Schunn categorized feedback into cognitive and affective types. Cognitive feedback includes issue identification, explanation, solution provision, and advice, while affective feedback consists of reconciliatory praise and vague expressions[17]. Patchan & Schunn found that the amount of feedback provided was not affected by the reviewers' ability or the text quality, but rather by the content of the feedback itself[18].

Research shows that while significant attention is given to online text-based peer assessment, feedback types in voice-based assessments are underexplored. Most studies emphasize one-way feedback, leading to vague evaluations and delays. Nicol's dialogic feedback model, where feedback providers and receivers collaboratively understand and negotiate feedback content, enhances engagement and effectiveness[19]. Dialogic feedback allows for prompt confirmation, clarification, and negotiation[20]. Social media platforms like Facebook, Twitter, WeChat, and QQ facilitate discussions, collaborative problem-solving, and language knowledge co-construction, creating ideal conditions for online multimodal dialogic peer assessment. This study compares voice and text peer assessments in social media spaces, focusing on feedback types and learners' attitudes.

3. Research Design

3.1. Research Questions

1) What are the differences in peer feedback forms between the online voice module and the online text module?

2) How do students' attitudes towards peer assessment differ between the online voice module and the online text module?

3.2. Sample of Population

The subjects of this study were 100 second-year high school students from two classes with similar English writing proficiency at a high school in Nanjing, China (50 students in each class). Statistical analysis and t-tests on their English writing scores showed no significant difference ($p > 0.05$). Students freely formed groups of four, resulting in 25 groups, to conduct peer assessment of post-reading writing tasks, a format with which they were familiar. Each group completed peer assessments using both the Microsoft Teams voice module and the QQ text module. The survey indicated that participants were proficient in using both QQ and Microsoft Teams. During the study, one researcher joined each discussion group but did not intervene.

3.3. Research Tools

This study utilized three tools: Microsoft Teams, the QQ platform, and "Wenjuanxing". Microsoft Teams was employed for real-time audio conferencing for voice peer assessment and recording interactive content. QQ was used for text-based peer assessment, while "Wenjuanxing" was utilized to survey students' attitudes towards these two forms of peer assessment.

3.4. Research Process

Before starting the task, introduce grading criteria and peer review guidelines, demonstrate procedures, and assign tasks. Select essay topics from the high school sophomore year's curriculum, requiring 100-word essays in 30 minutes. After writing, students exchange and review essays via Microsoft Teams and QQ. The experiment involves two stages: Class A conducts voice peer reviews on Microsoft Teams, while Class B does text peer reviews on QQ. In the second stage, both classes use online text and voice modules for peer review on the second topic. This study employed Likert scale questionnaires to assess the effectiveness and student attitudes towards online peer assessment based on text and voice modules. A total of 100 questionnaires were distributed and collected, with a 100% response and validity rate. The questionnaire's internal consistency reliability coefficient was 0.817.

3.5. Data Collection and Analysis

This study employs quantitative methods to analyze the data. The collected data were organized and transcribed, and all comments were categorized based on thematic units. Referring to the comment types proposed by Nelson & Schunn[21] and Wu & Schunn[22], coding and quantitative analysis were conducted. The categorization and coding process were independently performed by two experts, achieving an inter-rater reliability of 96.4%, and consensus was reached through discussion. After coding, the experimental data were processed using SPSS software. The comments in online peer assessment mainly included five types: problem identification, explanation, solution offering,

suggestion giving, and praise.

4. Results and Discussion

4.1. Research Results

Data were categorized and encoded based on meaning units, and descriptive statistics were computed using SPSS. A one-sample Kolmogorov-Smirnov test indicated normal distribution, allowing for paired sample t-tests. Significant differences between Class A and Class B were found in identifying issues and giving praise in both text and voice peer assessment. However, explaining and proposing solutions showed no significant differences, and no variations were observed in providing suggestions. In text peer assessment, students tended to point out issues without explanations or solutions and rarely focused on authors' strengths. Conversely, in voice peer assessment, students identified issues, provided explanations or solutions, and were more inclined to give praise.

The questionnaire results indicate that participants generally hold a positive attitude towards both peer assessment modes, believing they contribute to enhancing language and cognitive abilities and find the process enjoyable. However, students prefer the text-based mode over the voice-based one (Voice: $M=3.29$; Text: $M=3.58$). The text-based format encourages students to accept more peer suggestions (Voice: $M=3.37$; Text: $M=3.78$) and is more conducive to revising their manuscripts (Voice: $M=3.24$; Text: $M=3.68$). Nonetheless, students perceive voice-based peer assessment as more convenient and efficient (Voice: $M=3.52$; Text: $M=3.27$).

4.2. Research Discussion

In online text peer assessment, students tend to address issues directly but often lack explanations and overlook the author's strengths due to platform limitations, hindering expression and collaboration[23]. While error identification aids revisions, it may not enhance language knowledge[24]. Conversely, students in online voice mode prefer offering solutions, often with praise, indicating nuanced criticism[25]. Hesitation to provide direct criticism may stem from peer relationship concerns[26]. Voice mode assessments are more detailed and collaborative compared to text formats[27]. Motivation influences participation and performance, with some students lacking confidence and accepting feedback uncritically, leading to unresolved issues[28].

Survey findings reveal students' preference for text-based online peer assessment due to its facilitation of peer suggestions, document quality improvement, and writing skill enhancement. Mobile text interaction combines oral immediacy with written reflection, aiding expression, reflection, and collaboration. Clear chat records enable process review, aiding language focus and continuous improvement. However, voice-based peer assessment is perceived as more timely and efficient.

Overall, students hold a positive view of online peer assessment, enjoying its activities and recognizing their effectiveness, aligning with prior research. However, few strongly support it, mostly opting for agreement. This suggests partial support, likely due to confidence issues or distance perception in online communication. With further online learning and education development, online peer assessment will become increasingly accepted.

5. Conclusion

This study examined the impact of two online peer assessment modules, text and voice, on peer feedback for English writing and learners' attitudes. Results show that the text module primarily identifies issues, while the voice module emphasizes praise. Learners generally prefer the text module for its clarity, while considering the voice module more convenient and efficient. The study highlights the effectiveness of online text and voice interaction in promoting peer collaborative learning. Future research could enrich task formats, optimize grouping, and delve deeper into the impact of online peer assessment on peer feedback, including comparison with video peer assessment modules, to enhance effectiveness.

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