

# Improvement of English Writing Skills through Online Interactive Platforms and Virtual Reality Technology

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**Abstract:** Writing is an important ability in English learning. Although current technological means can help people better master English, many English learners still face the problem of difficulty in writing. This article analyzed how to improve English writing skills through online interactive platforms and virtual reality technology, helping English learners achieve better results in writing. Through online interactive platforms, students' learning situation can be tracked and recorded, and the quality of course objectives and learning plans can be formulated based on their situation. Virtual reality technology can provide students with virtual writing competitions to gain a sense of honor, and students can receive more practical writing training and guidance. In order to demonstrate the effectiveness of online interactive platforms and virtual reality technology in language writing, this article selected 80 English major students from a certain university for experimental analysis and divided them into two groups. Group A is a traditional classroom writing learning method, and Group B is a writing learning method based on online interactive platforms and virtual reality technology. Before the experiment, 4 and 3 students from Group A and Group B scored above 80 in English writing, respectively. After the experiment, 6 and 13 students from Group A and Group B scored above 80 in English writing, respectively. It can be seen that the English writing scores of Group B students have greatly improved, while the English writing scores of Group A students have not changed much.

**Keywords:** Online Interactive Platform, Virtual Reality Technology, English Writing Proficiency, Virtual Writing Competition

## 1. Introduction

In today's society, many English students view English writing as a difficult skill to master, mainly due to the lack of practical guidance, materials, practice, and feedback mechanisms from teachers. In English writing teaching, the traditional combination of "teaching" and "practice" makes it difficult to meet the needs of learners at different levels. In English writing tests, people pay more attention to knowledge such as grammar and syntax, while neglecting the influence of language content and sense. This is likely to cause students to only focus on language forms and neglect the artistic and ideological connotations of language expression. Teng Feng's research emphasized the role of group metacognitive guidance in English writing. He conducted a study on Chinese foreign language English students who received group feedback guidance and self explanatory guidance, and compared it with a control group who did not receive metacognitive guidance. The results showed that group feedback guided learners achieved the highest average score on all indicators [1]. Xu Jinfen found that automatic writing assessment (AWE) systems have increasingly been incorporated into English writing teaching, but there is still no consensus on how the teaching use of AWE affects learners' writing. The results showed that after mandatory use of automatic writing assessment, the differences in writing accuracy among learners of different levels were significantly reduced, but syntactic complexity and fluency remained unchanged [2]. Moses Rachel Nyanamoney believed that English is an international language and very popular. However, English writing has always been a challenge for second language students. Developing students' writing ability is one of the main challenges that most school teachers currently face. Teachers also face some challenges in teaching students writing skills [3]. The above scholars aim to explore the challenges students face in learning writing skills.

The emergence of online interactive platforms and virtual reality technology has provided an

effective way to solve the problems in English writing. It provides English learners with more flexible, rich, and personalized learning experiences, greatly improving their writing skills. Topacio Katrina NInfa Morales aimed to understand the effectiveness of using online learning platforms such as learning management software for English writing teaching in the absence of traditional classroom teaching. He also conducted focus group interviews to understand the advantages and disadvantages of online teaching. He revealed that students believe that online teaching helps to obtain resources and express opinions, and facilitates the reduction of time issues and fear of direct feedback [4]. Syaffi Ahmad found that the Internet has played an important role in the field of education. Because traditional teaching activities are considered insufficient to support students' English learning, especially in the context of the widespread use of English in schools, educators combine face-to-face interaction with online courses for blended learning. Google Classroom is an online platform for teacher-student interaction, collaboration, sharing, and evaluation of assignments, grades, classroom discussions, notifications, and evaluations. Its goal is to help educators leverage the power of social media to customize classrooms for all students [5]. With the acceleration of global integration and informatization, English has become the main means of cross-cultural communication for people around the world. In this situation, it is necessary to use online interactive platforms to improve students' English writing skills. This article analyzes the specific application of online interactive platforms and virtual reality technology on English writing ability.

## **2. Application of Online Interactive Platforms and Virtual Reality Technology in English Writing**

English writing is a practical activity for the comprehensive application of English knowledge, and among the four abilities of "listening, speaking, reading, and writing", it is the most difficult. For a long time, many teachers have been actively exploring how to improve students' English writing skills and providing some effective teaching strategies. However, the current English writing level of students is still relatively low [6-7]. In the traditional teaching of English writing, teachers first explain example sentences, then ask students to imitate them, and then the teacher gives them a rating. This article aims to explore how to use online interactive platforms and virtual reality technology to promote the improvement of college students' English writing proficiency.

### ***2.1 Application of Online Interactive Platforms in English Writing***

#### **(1) Joining a course or group**

Students can participate in specialized English writing classes or groups on online interactive platforms, communicate with teachers and classmates in real-time, exchange ideas, and explore their writing experiences together [8]. English writing is not only a systematic teaching for students, but also an important part of writing training, enabling them to gain more exercise in writing. Online interactive platforms provide a platform for students to communicate with each other, where they can exchange their learning and writing experiences with each other. This is very beneficial for English writing [9-10].

In online interactive platforms, there are generally many excellent examples and writing guides. Students can read and study these examples to have a clear understanding of writing skills and expression methods in various genres, and then practice according to the online writing guides to continuously improve themselves. During this process, students can not only read excellent English texts online, but also master different writing methods in different texts, and even appreciate the cultural connotations contained in these texts. In addition, many online platforms have specialized writing tutoring, such as grammar correction and language expression, which are very helpful.

#### **(2) Tracking records**

The online interactive platform not only provides students with a large number of writing resources, but also provides them with a clear teaching goal and learning plan. On the platform, there are generally some tracking and recording tools available, so that students can record their learning progress and results, and promptly identify their shortcomings and make improvements. In short, online interactive platforms have a great effect on improving English writing skills and are worth promoting. The various functions and resources of online interactive platforms are fully utilized, enabling students to effectively improve their writing skills and expression abilities, thereby achieving the true purpose of cross-cultural communication and exchange.

Students can use some tracking and recording tools provided on online interactive platforms to

record their learning progress and results, so that they can identify their shortcomings in a timely manner and make improvements. This can help students better grasp their learning pace, adjust their learning plans in a timely manner, and thus improve learning effectiveness. Overall, online interactive platforms can help students improve their English writing skills [11].

## ***2.2 Application of Virtual Reality in English Writing***

With the development of technology, virtual reality technology is becoming increasingly popular and has become an important interactive learning method. For English learners, applying virtual reality technology can also help improve their English writing skills.

### **(1) Virtual writing competition**

Virtual writing competitions are a way to utilize virtual reality technology to better promote English writing skills. For example, it is possible to establish a community similar to the "English Writing Exchange" where news of writing competitions can be posted to stimulate students' interest in English writing, thereby improving their level of English writing [12-13]. On this platform, teachers can publish various types of writing competitions and tell students how to participate, time restrictions, and other information. Participants must carefully read and understand the competition rules, and submit excellent entries within the specified deadline.

### **(2) Virtual writing guidance platform**

The virtual writing guidance platform is an English writing guidance platform based on virtual reality technology. It can detect students' shortcomings in English language, article structure, and language expression in real time, and provide corresponding opinions and improvement measures, so as to enable students to better conduct personalized writing training and achieve the goal of improving their English writing level [14]. The Virtual Writing Communication Community is an online learning and social network platform based on virtual reality technology, with language and writing communication as the main content. In this platform, students can communicate and interact with classmates and teachers online, publish articles, receive feedback and evaluation, and establish a collective of mutual assistance and assistance through virtual reality technology, promoting the improvement of English writing ability [15-16]. Therefore, the application of virtual reality technology in English writing classes has played a positive role in promoting the improvement of English writing and also providing inspiration to students.

Students must complete their assignments on the virtual writing guidance platform within the specified deadline and upload them to the virtual writing guidance platform before the submission deadline. During this process, students are required to actively think, write independently, collect information, and engage in logical thinking [17-18]. After the contestants submit their entries, the instructor can grade and feedback the contestants' entries according to the competition rules. The teacher may consider many factors, such as structure, language expression, syntax error, etc. At the same time, on the virtual writing guidance platform, students can also evaluate and like each other to enhance academic exchange. After the competition, students should summarize and reflect on their writing, and analyze based on feedback from teachers and other classmates to determine their strengths and weaknesses, and develop corresponding learning plans to improve their writing skills [19].

## **3. Effect of Online Interactive Platforms and Virtual Reality Technology on English Writing**

### ***3.1 Interactivity***

The online interactive platform provides students with a real-time communication and interaction platform, where they can receive timely feedback and guidance in the interaction process with teachers and classmates, thereby accelerating the learning process and improving learning effectiveness. Online interactive platforms can broaden students' reading and writing horizons, provide them with more materials and sample articles, and enable them to communicate with each other online, broadening their horizons. This online interactive platform can also provide personalized learning services for students, providing targeted writing guidance and practice according to their different requirements and degrees, so that they can better solve specific problems and improve their writing skills. In terms of English writing, online interactive communication platforms can play a significant role. In order to analyze the effectiveness of online interactive platforms and virtual reality technology on English writing, this article selected 80 English major students from a certain university for investigation and analysis. They

were divided into two groups of 40 students each. Group A used traditional classroom writing methods for writing, while Group B used online interactive platforms and virtual reality technology for English writing. Group A and Group B believe that the interactivity of their writing methods is shown in Figure 1:

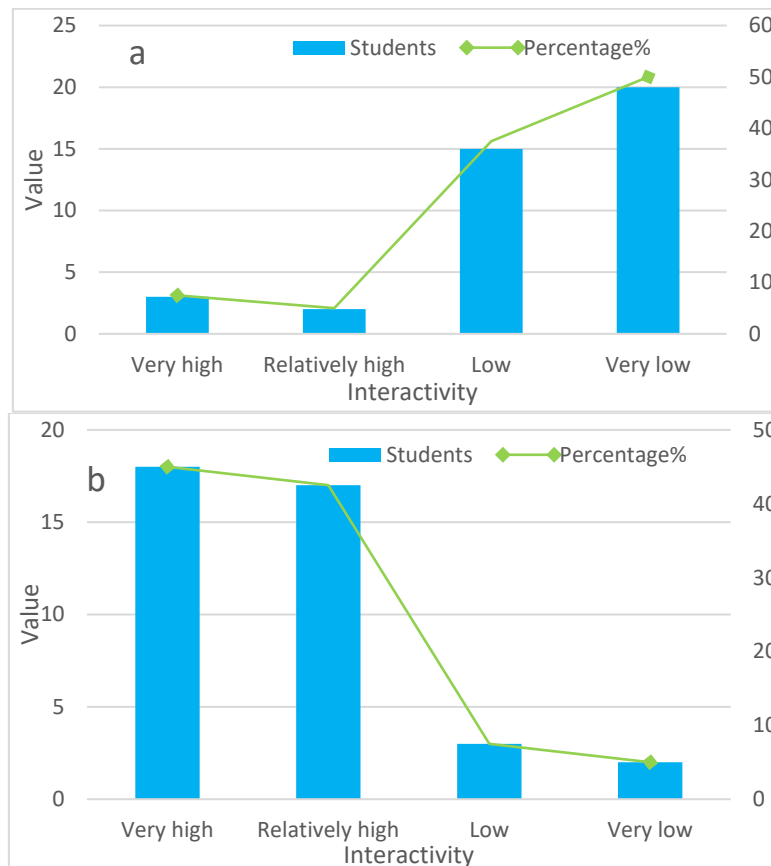


Figure 1 (a). Group A considers the interactivity of their writing methods

Figure 1 (b). Group B considers the interactivity of their writing methods

Figure 1: Group A and Group B consider the interactivity of their writing methods

As shown in Figure 1: In Figure 1 (a), there are three students in Group A who believe that their writing methods are highly interactive, accounting for 7.5% of the total; There are 2 students in Group A who believe that their writing methods are highly interactive, accounting for 5% of the total; There are 20 students in Group A who believe that their writing methods have very low interactivity, accounting for 50% of the total

In Figure 1 (b), there are 18 students in Group B who believe that their writing methods are highly interactive, accounting for 45% of the total; There are 17 students in Group B who believe that their writing methods are highly interactive, accounting for 42.5% of the total; There are two students in Group B who believe that their writing methods have very low interactivity, accounting for a percentage of 5%.

Virtual reality technology enables students to better experience the entire process of English writing, thereby promoting the improvement of English writing skills. Virtual writing competition is a new method of using virtual reality technology to guide English writing teaching. It can inform students of the methods and rules of participation by setting different themes, questions, and competition systems, so that they can participate in a virtual laboratory to improve their English writing ability. Virtual reality is the key to achieving online writing competitions. By participating in virtual writing competitions, students can gain exercise in English writing competitions, develop a strong interest in English writing, and greatly improve their confidence in English writing. This helps them better understand and master writing skills and methods, cultivate their writing habits, and develop their autonomy.

### 3.2 Enthusiasm

Virtual reality can create various scenarios, allowing students to immerse themselves and providing them with rich and realistic visual and tactile experiences, which helps them have a better understanding of the knowledge background and application of English writing. This "immersive" teaching situation can enable students to better experience the entire process of English writing and better mobilize their enthusiasm for English writing. The level of enthusiasm of the two groups of students in writing before the experiment is shown in Table 1:

*Table 1: The level of enthusiasm of the two groups of students in writing before the experiment*

Positive degree	Group A	Group B
Very positive	2	1
Relatively positive	5	4
Negative	19	21
Very negative	14	14

As shown in Table 1, only 2 and 1 students from Group A and Group B were very active in writing before the experiment; Before the experiment, only 5 and 4 students from Group A and Group B were more active in writing, respectively; Before the experiment, there were 19 and 21 students in Group A and Group B who were negative in writing, respectively; Before the experiment, there were 14 students in Group A and 14 students in Group B who were very negative in writing, respectively. Before the experiment, the enthusiasm for writing among Group A and Group B students was not high.

The level of enthusiasm of the two groups of students in writing after the experiment is shown in Table 2:

*Table 2: The level of enthusiasm of two groups of students in writing after the experiment*

Positive degree	Group A	Group B
Very positive	3	13
Relatively positive	6	18
Negative	18	5
Very negative	13	4

As shown in Table 2: After the experiment, there were 3 and 13 students in Group A and Group B who were very active in writing, respectively; After the experiment, there were 6 and 18 students in Group A and Group B who were more active in writing, respectively; After the experiment, there were 18 and 5 students in Group A and Group B who were negative in writing, respectively; After the experiment, there were 13 and 4 students in Group A and Group B who were very negative in their writing, respectively. After the experiment, the enthusiasm of Group B students in writing has been greatly improved, while the enthusiasm of Group A students in writing has not changed much.

Online interactive platforms and virtual technologies provide students with many forms of interaction, such as live classes, video explanations, online discussions, community interactions, etc., enabling them to have a deeper understanding and mastery of English writing. Through online interaction, one can participate in many interesting activities, such as writing competitions, story writing events, etc. This can not only increase students' interest in English writing, but also create a relaxed and pleasant atmosphere. On online interactive platforms, students can be encouraged to interact and share, such as evaluating, praising, and commenting on each other, sharing their writing experiences and experiences, thus building a good learning community, promoting communication and cooperation among students, and enhancing their enthusiasm.

### 3.3 Writing Score

The virtual writing guidance platform can provide real-time grammar and vocabulary prompts to students, and correct errors. At the same time, it can also evaluate and provide suggestions based on the structure and logic of the composition, thereby improving students' efficiency and accuracy in writing. The virtual writing guidance platform can provide students with a variety of questions and application scenarios, allowing them to create in familiar or unfamiliar fields. At the same time, it can also improve their writing thinking and expression abilities, allowing them to have stronger flexibility and creativity in the writing process. The teaching mode of using a virtual writing guidance platform can help students better master English writing skills, gradually improve their English writing ability, and achieve good results in both testing and practice. The English writing scores of Group A and Group B students before and after the experiment are shown in Figure 2:

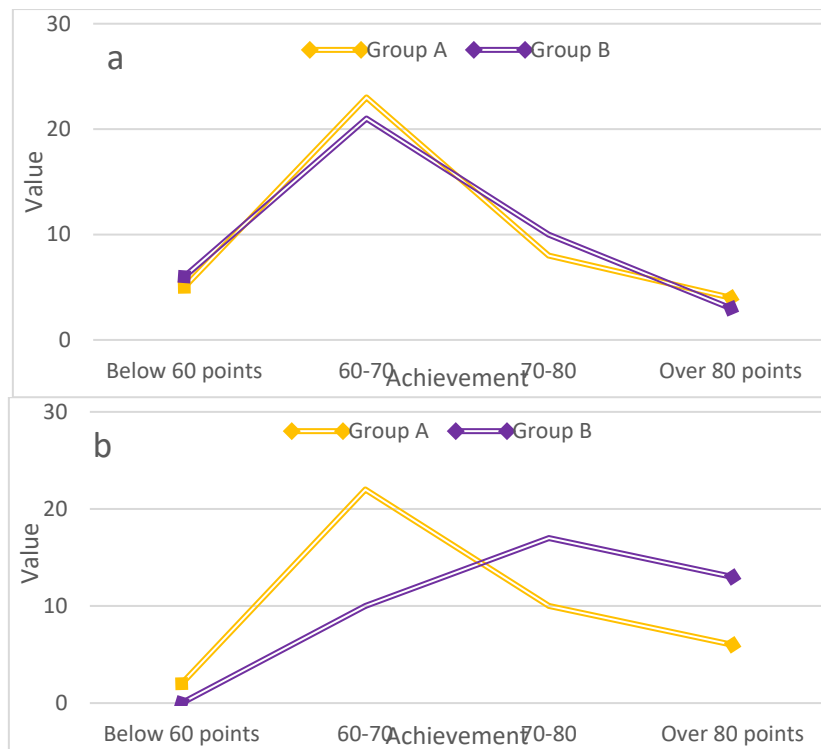


Figure 2 (a). English writing scores of students in Group A and Group B before the experiment

Figure 2 (b). English writing scores of students in Group A and Group B after the experiment

Figure 2: English writing scores of Group A and Group B students before and after the experiment

As shown in Figure 2: In Figure 2 (a), before the experiment, the English writing scores of Group A and Group B students were below 60, with 5 and 6 students respectively; Before the experiment, 23 and 21 students from Group A and Group B scored between 60 and 70 in English writing, respectively; Before the experiment, the English writing scores of Group A and Group B students were between 70 and 80, with 8 and 10 students respectively; Before the experiment, 4 and 3 students from Group A and Group B scored above 80 in English writing, respectively.

In Figure 2 (b), after the experiment, the English writing scores of students in Group A and Group B were below 60, with 2 and 0 students respectively; After the experiment, the English writing scores of Group A and Group B students ranged from 60 to 70, with 22 and 10 students respectively; After the experiment, the English writing scores of Group A and Group B students ranged from 70 to 80, with 10 and 17 students respectively; After the experiment, 6 and 13 students from Group A and Group B scored above 80 in English writing, respectively.

#### 4. Conclusions

Online interactive platforms play a very important role in improving English writing. Through the development and innovation of online interactive platforms, students have a deeper understanding of English writing skills and cultural knowledge, thereby cultivating their language thinking and cross-cultural communication abilities. By implementing the writing strategies of online interactive platforms and virtual reality technology, students have established a harmonious relationship of mutual support and mutual responsibility, and have gained more joy in interactive writing, thereby enhancing their thinking and high-level reasoning abilities, and enabling them to find solutions to problems through cooperation. Through online interactive platforms and virtual reality technology, not only can students communicate and share materials, but also their writing skills can be trained. This provides a great opportunity for students with major problems to learn from other capable students. In the process of working together, they have a sudden sense of openness and gradually master their writing methods, thereby better expanding their writing thinking and vision. Virtual reality technology utilizes human-computer interaction to enhance students' writing skills, enabling them to engage in a relaxed and enjoyable collaborative atmosphere. There is an equal and cooperative dialogue between teachers and students. Students are consciously, actively, and freely exerting their thinking, and continuously improving themselves on this basis, thus achieving the goal of English writing and also improving their

personality.

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