

## Research Article

# Teaching Design of English Writing Based on UMU

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With the development of time, traditional teaching methods cannot meet the needs of education and society for innovative talents. Blended learning conforms to the reform of education and teaching and is becoming the new normal of future education. Blended learning is a kind of teaching mode that integrates face-to-face teaching and online learning after people reflect on online learning to improve the learning effect. This kind of teaching mode that transcends the limitation of time and space brings great convenience to students and teachers. Blended learning can not only satisfy students' personalized learning style and the independent construction of personalized knowledge but also fully reflect the characteristics of students as cognitive subjects in the learning process. Compared with traditional education, blended learning pays more attention to the perspective of students and creates a truly highly participatory and personalized learning experience for students by using the Internet, mobile technology, and face-to-face teaching, which is the promotion and improvement of classroom teaching. In mixed learning in the Internet age, various online teaching platforms can provide students with diversified learning resources and learning methods. Supported by information technology, the UMU interactive learning platform provides independent learning methods, open learning space, and two-way interaction. The platform has the basic functions of online discussion, uploading and downloading learning resources, and submitting assignments. At the same time, it can be used on the Web and mobile phones to organize classes and interactions at any time. Teachers can create a variety of activities and courses on the platform and can also add interaction in the content link to improve the quality and experience of traditional education through mobile Internet technology.

## 1. Introduction

With the development of time and technology, information technology has already penetrated into all aspects of social life. Profound changes are taking place in people's production mode, lifestyle, and learning mode. In the Information Age, education for all, quality education, personalized learning, and lifelong learning are the main characteristics and objectives of education development. In recent years, many countries in the world have shown great concern about the important role of education informatization in the improvement of national quality and the enhancement of national innovation ability. With the rapid development of modern information society, society has higher and higher requirements for people's information literacy. Basic education is an important part of the project of improving national quality and also an important part of the development of national education. If we want to

cultivate information literacy on this basis, we must give full play to the important role of information technology discipline in the basic education stage. In the basic education stage, information technology education should keep pace with time, so that students can systematically master the basic knowledge and skills of the subject, and comprehensively improve students' information literacy to meet the needs of information society. In the basic education stage, information technology discipline plays an important role in improving students' awareness and ability to use their basic knowledge and skills to solve practical problems and handle information [1].

With the development of education, the disadvantages of the traditional teaching mode are gradually obvious [2]. The traditional teaching mode is "transmission acceptance" teaching. Although this mode can give full play to the leading role of teachers, and it is easy for teachers to realize the management, organization, and control of classroom

teaching, it ignores subjectivity, initiative, and creativity of students. Teachers blindly instill knowledge into students and make them passively accept it. For a long period, students are likely to lose interest in knowledge they have learned, and it is almost impossible to achieve the cultivation of divergent thinking, reverse thinking, and creative thinking, which is equivalent to a fundamental lack of foundations needed for the breeding and growth of innovative talents; it is difficult to achieve a relatively ideal teaching effect. This mode has long been unable to meet the needs of society for innovative talents and the development requirements of national education informatization. To cultivate talents who meet social needs, it is necessary to strengthen practical ability, innovate the way of education, start from basic education, reform the traditional teaching mode, pay attention to cultivating students' interest in learning, scientific interest, and innovation consciousness, and at the same time, strengthen the training of scientific methods, and gradually improve students' logical and dialectical thinking ability to meet social requirements [3].

The teaching ideas and methods are backward. In the basic concept of most English teachers, the basic purpose of English writing teaching is to enable students to "master" English knowledge and to mainly achieve a good result, but it does not take into account whether students have a basic understanding of English knowledge. Consequently, many students, even if they have "mastered" English knowledge, do not know how to learn English and do not know all kinds of learning skills, so the efficiency of students in learning English is very low. At the same time, under the pressure of the general environment in which the concept of examination-oriented education is the mainstream [4], in order to enable students to successfully enter the school and pass the examination, quite a number of teachers almost choose this cramming and rote English teaching method. The cramming teaching method also has some advantages. It can greatly reduce the teaching workload of teachers on the basis of ensuring the test results of students. However, it must be recognized that the cramming teaching method cannot adapt well to the fast-paced teaching state in the current educational environment [5]. At the same time, it has a great impact on the ontological interest of knowledge and will hinder the good cultivation of students' learning interest. In addition, teaching refers to "teaching" + "learning," which deviates from the essence of teaching and seriously affects our teaching efficiency.

At present, "Internet +" has become the mainstream of society [6]. Cloud computing and big data technology have an extraordinary impact on various fields, and education naturally cannot be separated from these means. Nowadays, under the information-based teaching practice of schools, the traditional classroom has been gradually pushed to the direction of digitalization, intellectualization, and mobility from the initial role as an auxiliary tool to the deep integration of information technology and curriculum. Many schools have opened and used intelligent multimedia teaching rooms, e-book bags, learning intelligent mobile terminals, etc. From this, we can see that the Internet era is gradually moving towards mobile Internet. The UMU

interactive learning platform has injected new vitality into classroom teaching. In classroom teaching, classroom activities such as electronic check-in, question guidance and opinion voting, intelligent knowledge testing, efficient questioning and discussion, and group task-driven interactive teaching based on the UMU learning platform can greatly stimulate students' interest in learning. The practice shows that it is highly feasible and effective to carry out English writing teaching in the information-based teaching environment based on UMU, which can guide students to think actively and participate actively and improve the effect of classroom interaction teaching. Therefore, the author thinks about classroom interactive teaching supported by information technology, in order to promote deep integration of information technology and curriculum teaching.

Under the above background, this study takes the network-teaching platform as the main basis and combines the unique functions of the UMU interactive platform to apply the learning platform to English writing teaching. In order to improve students' English writing performance and explore the impact on teaching, we cultivate students' active learning attitude. At present, there are not a few cases of teaching research based on online teaching platforms such as Moodle [7] and blackboard [8]. In recent years, various learning platforms, such as Rain Classroom, Blue Ink Cloud Class, learning link, and enterprise WeChat, have gradually been loved by teachers and students and applied to the classroom. However, there is little research on the UMU mobile learning platform, and the research on the theoretical basis and application mode is not deep enough. By absorbing the essence of traditional English writing teaching design and combining the functions of the microvideo, check-in, and questionnaire on the UMU interactive learning platform, this study summarizes a new English teaching mode based on the UMU interactive learning platform, enriches the relevant theoretical content, greatly develops the English teaching design, and is more convenient to provide a theoretical basis for the use of UMU in English writing learning and promote the deep integration of information technology and subject teaching.

## 2. Relevant Concepts and Theoretical Basis

### 2.1. Related Concepts

*2.1.1. English Writing Teaching.* As a branch of the West Germanic language [9], English was spread to all parts of the world through the early British colonial activities and had a far-reaching impact. So far, English has become the official language of many countries in the world. With the further development of economic globalization, the world is connected and the use of English has further expanded. China has always attached importance to English education. English is one of the three major subjects in China's compulsory education stage and even the whole education stage, which has trained a large number of talents for China to move towards globalization and internationalization. English writing is a form of communication and information transmission in the process of English learning. It is an

important part of the English language and an important part of English teaching.

*2.1.2. Network Teaching Platform.* A network teaching platform is an important way to deeply integrate information technology and subject teaching and to promote the development of education with modern information technology. It makes the teaching process open, interactive, and cooperative. In recent years, with the in-depth development of intelligent education, the teaching platform actively integrates advanced information technology, presenting the characteristics of digitalization, networking, and intelligence. The network teaching platform came into being. The network teaching platform is an integrated teaching service system that connects online and offline paths and integrates services such as teaching, inquiry, discussion, homework, and testing and evaluation. The emergence and application of the network teaching platform have made a variety of intelligent and personalized teaching services such as multi-interaction in the classroom, real-time sharing of resources, anytime and anywhere learning, online testing and evaluation, personalized teaching based on big data, and students' independent learning. It is simple and easy to operate. As long as teachers and students or classrooms are equipped with intelligent terminal equipment that can carry the network teaching platform, the above network teaching process can be realized.

*2.1.3. UMU Interactive Platform.* A UMU interactive platform is an intelligent teaching platform developed by Beijing Youmu Technology Co., Ltd. which is dedicated to innovative teaching methods and redefined knowledge sharing and dissemination of learning. It is the abbreviation of you, me, and us. It advocates the interactive and open learning concept that everyone can learn and everyone can teach. Knowledge production is decentralized, and everyone is the disseminator of knowledge. The UMU interactive platform is characterized by interactivity, openness, sharing, collaboration, and intelligence.

## 2.2. Theoretical Basis

*2.2.1. Constructivist Learning Theory.* Constructivism theory is a systematic and complete learning theory gradually developed by Piaget and Vygotsky and others on the basis of criticizing and inheriting cognitive theory. It is one of the most influential learning theories in the contemporary era [10, 11]. Constructivism theory includes three aspects: knowledge view, learning view, and student view. A constructivist learning view holds that knowledge is a kind of cognition or hypothesis about the objective world, which will change with the change of objective existence. The constructivist learning view holds that learning is not rote and superficial cognition but a process of thinking collision and knowledge reorganization. When encountering new knowledge, students are required to connect with existing

knowledge and transfer knowledge and gradually understand and finally reach recognition.

*2.2.2. Mixed Teaching Theory.* Hybrid teaching is a teaching method that combines online teaching with traditional face-to-face teaching with the support of modern information technology [12] and combines "online" and "offline" teaching. Hybrid teaching is not only a simple change in teaching form brought about by adding online classroom to traditional face-to-face teaching but also a simple change in teaching form. After formulating teaching objectives, clarifying teaching contents, and analyzing teaching needs, it makes use of the advantages of face-to-face communication of traditional face-to-face teaching and open sharing of network online teaching to learn from each other's strong points and complement each other's weak points, so as to promote the improvement of teaching efficiency and teaching quality.

*2.2.3. Learning Engagement Theory.* Learning engagement was initially a concern and field of western scholars, studying the causal relationship between students' academic performance and their degree of learning engagement [13]. The theory of learning input generally believes that students must make enough behavior input to produce good learning results. For behavior input, psychological input is required. Psychological input can be divided into psychological cognitive input and psychological emotional input. Cognitive and emotional input depends on behavior input. When the input of behavior, emotion, and cognition tends to be unified and positive, the learning effect is the most ideal.

*2.2.4. Master Learning Theory.* Bloom and other educators put forward the theory of mastery learning in the 1960s [14]. Benjamin Bloom was a famous American psychologist and educator. He believed that almost all children can become excellent students. In short, the learning ability of different students is not the same. Whether the learning content can be mastered and whether the learning effect is good or bad do not depend entirely on the learning ability of students but depend on the length of time that students need to spend on a certain learning content. When a student finds learning conditions they like, the learning guidance that conforms to their own situation, and the corresponding learning time, they can master the knowledge they need to learn. The teaching process of mastering learning theory mainly includes the following steps: (1) student orientation: before the new learning task begins, the teacher needs to clearly convey learning objectives to students, stimulate students' goal awareness, and affirm their ability. (2) Give lectures: teachers teach through collective teaching and set the same learning time for each student. (3) Presentation errors: After teaching, the teacher will give an in class test, i.e., formative evaluation, to obtain the students' learning situation in time and know which students have not fully mastered and which students have learned the previous teaching contents. (4) Correct mistakes: Teachers teach those students who have

not fully mastered the knowledge and correct their mistakes according to feedback information obtained before, while those who have learned can choose to continue to learn the previous knowledge to consolidate the foundation or can choose to enter the next step to learn new knowledge. (5) Reevaluation. The students who fail to master the test will be given a chance to take the second test. The students who meet the standard will directly learn the next unit of knowledge, and the students who fail to pass the test will learn again. The idea of mastering learning theory is in line with the idea of teaching students according to their aptitude, but it is highly personalized, and it also puts forward higher requirements for students' initiative. It has obvious limitations in use and is not applicable to the existing teaching mode.

The UMU platform can integrate preclass, in class, and after class. Before class, teachers send microclass videos for students to preview, including voice explanations and videos. They can also design some small questions to test some students' mastery. In class, students interact with the teacher with questions. After class, students can see their mastery through homework. In this way, as long as there is enough learning time and guidance, students can quickly grasp the key and difficult points.

### 3. Teaching Design Based on the UMU Platform

*3.1. Application Foundation of the UMU Interactive Learning Platform in English Teaching.* The UMU interactive learning platform is a learning platform that includes multiple roles and is specially designed and arranged for students' learning. It has the characteristics of interaction and mobility and can realize the interaction between machines and people and the interaction between people. The UMU interactive learning platform has a lot of functions, including microclasses (mainly audios, videos, and live microclasses) and various interactions in the classroom (classroom discussion, learning questions, student examinations, and student daily check-in). From classroom upgrading to blended learning to online community learning, UMU promotes the revolution of learning.

English is characterized by humanism and instrumentality, which can enhance the interaction between people. Therefore, the use of the UMU platform can increase its interest. With the wide application of the learning methods of network learning, the learning field has gone out of the classroom. Through various network learning platforms, students can learn independently on the network. Through the network learning platform, students can arrange the time and place of learning themselves, arrange their own learning reasonably, and make learning more personal.

At present, according to the statistics from CNKI, researchers have practiced many intelligent online teaching platforms, including Rain Classroom, Blue Ink Cloud Class, and WeChat public platform. At present, the widely used online learning platforms are Rain Classroom and Blue Ink Cloud. They are online real-time teaching management platforms that appeared on the early Internet. However, for UMU, its interactive learning platform is new, mainly

relying on the mobile Internet, so it mainly shows mobility and interactivity. In addition, the platform is still in practice research, not widely used in teaching.

The biggest advantage of the UMU interactive learning platform over Rain Classroom and Blue Ink Cloud Class is that the UMU interactive learning platform is more interactive, and the microclass function is not available in other software. Nowadays, the use of microclass teaching has become a teaching tool for every teacher. The UMU interactive learning platform conforms to this development trend and fully increases the design of teaching resources, which is an advantage that Rain classroom and Blue Ink Cloud Class do not have. Once students start to use the mobile terminal to log in and learn, teachers can start to interact with students through their own UMU. In this app, students' real-time learning status can be monitored at any time, and online teacher-student exchanges and student-student exchanges can be conducted to increase the positive interaction in the classroom. Moreover, the platform does have strong advantages in mobile interaction. It can conduct classroom interaction through code scanning at any time and complete daily interaction between teachers and students through daily sign in, discussion after class, question and answer, questionnaire, information on the wall, etc. Now teachers and students can teach and learn through this platform, which is popular among the public.

*3.2. Construction of the Teaching Mode Based on the UMU Platform.* The teaching mode refers to a relatively stable teaching activity structure and activity procedure established under the guidance of certain teaching ideas or theories [15]. The teaching mode usually takes the form of a structural framework, which often conveys a certain teaching idea and teaching theory. The teaching structural framework and teaching procedures formed by different teaching ideas and teaching theories are also diametrically opposite, and the effects on teaching are also different. A new teaching idea can be improved in the actual process only under the promotion of a certain teaching mode, and then, a relatively perfect teaching model can be produced. According to the concept and definition of a teaching mode, the following design is carried out based on the UMU interactive learning platform, as shown in Figure 1.

#### 3.3. Preliminary Analysis

*3.3.1. Learning Demand Analysis.* Learning needs mainly examine and analyze the gap between the current level of learners and the level that can be reached after efforts. This gap is mainly analyzed from the dimensions of knowledge, skills, emotions, and attitudes. Through the questionnaire survey, we learned that the learners' basic use of UMU is very limited and they do not know much about these online intelligent learning platforms. However, they are very open and active in accepting such apps, and their acceptance is relatively high. I am familiar with similar online applications. The students also have high evaluation and good feedback. The students' evaluation of these applications is

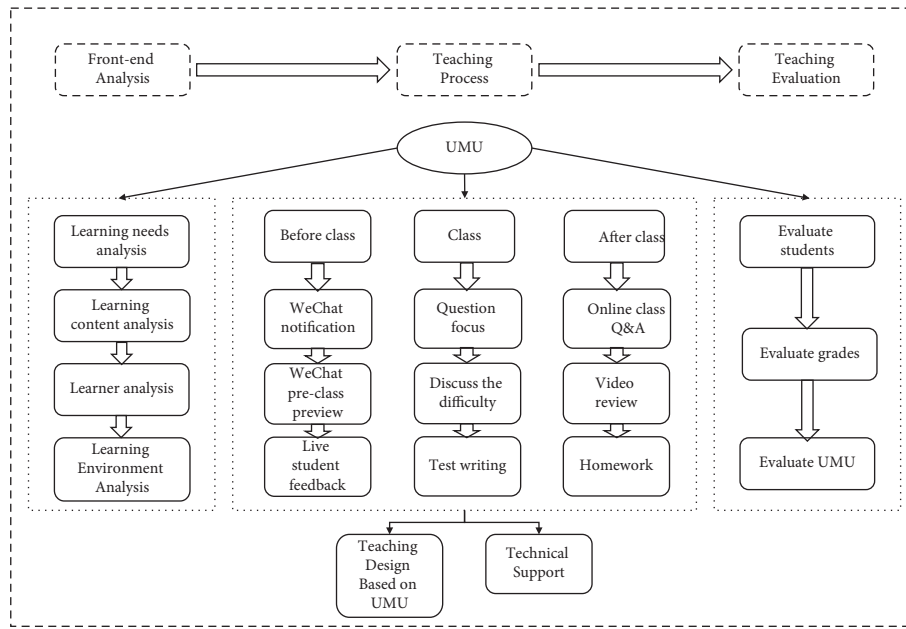


FIGURE 1: Teaching mode design based on the UMU platform.

also very high, and the feedback after use is also very good. For this kind of online teaching to be put into use in daily English courses, everyone’s enthusiasm is still very high, and their expectations are also high.

**3.3.2. Analysis of Learning Contents.** After systematic learning, learners can acquire a lot of knowledge, practical skills, and various experiences, which are called learning contents. Learners learn the learning content mainly by improving their personal ability. Depth analysis of the learning content is based on understanding learners’ learning expectations in depth after analyzing learners’ learning requirements, so as to determine the difficulty of the learning content for the learners. Analyzing learning content is an indispensable part of instructional design. In general, it is necessary to analyze learners’ learning content before instructional design.

English writing in the traditional classroom often lacks communication between teachers and students [16], which is difficult to fully mobilize students’ enthusiasm, and the interaction between teachers and students is limited after class. Through the effective application of the UMU interactive learning platform in the learning content, especially in the dialogue, we can better change the current situation of English learning.

**3.3.3. Learner Analysis.** Before teaching, it is necessary to understand and analyze learners [17] and to understand the previous experience, existing knowledge level, learning psychology, characteristics, style, etc., of learners, so as to formulate a distinctive teaching plan according to needs of learners, so as to achieve scientific teaching.

Students are in the transition period of English learning. They have a certain English foundation and ability and have

a certain perception of contents of textbooks, and they are in adolescence, curious about new things, and good at quick thinking and accepting new things.

**3.3.4. Analysis of Learning Environment.** The so-called learning environment, in essence, refers to the external conditions that can have an impact on learners’ learning. In a good environment, it can help cultivate learners’ learning ability and also help learners to actively construct knowledge. Learning environments can generally be divided into physical and technical environments [18]. Physical environment mainly includes some physical resources such as class capacity, basic furnishings and decoration design of the classroom, and teaching teachers. These physical resources are closely related to the teaching mode used by teachers in teaching and will have a certain impact on the actual effect of teaching. For example, whether it is conducive to collaborative learning between groups in the actual learning environment. It is also important whether the learning model being explored can be carried out normally.

**3.4. Teaching Process and Activity Design**

**3.4.1. Preclass Preview**

(i) *Questionnaire Survey.* Before the beginning of the course, students should be investigated. This requires the use of the self-contained questionnaire function of UMU to investigate students’ learning attitude, classroom interaction, and understanding of UMU [19]. After students submit questionnaires in class, the survey results can be put on the large screen in real time, which is clear and convenient for teachers to carry out teaching activities.

(ii) *WeChat Invitation* [20]. It is very simple for students to participate in the interaction and learning of UMU. Learners

and teachers build groups opposite each other in the classroom. After returning home, the teacher sends the UMU invitation code to the group. Participants do not need to download the mobile app and can participate by scanning the QR code or visiting the website link. Each interaction and course has a unique two-dimensional code and can be invited to participate in the course. When students enter the UMU learning group, they can sign in and punch in and discuss with the teacher about problems they do not understand, and the teacher can also supervise students to preview before class.

(iii) *Use UMU to Make Microlessons.* UMU microclass is the world's first microclass mode that can be taught by everyone [21]. Each UMU microclass supports up to 9 lecture notes and 5 minutes of voice content, and the production of the UMU microclass can be mastered in 3 minutes. The learning flow consumption of each UMU microclass is less than 1m, which is suitable for most weak network environments. Students can play smoothly through mobile phones and computers and participate in learning anytime and anywhere. Before class, teachers can share the content of the next day's lecture on the platform for students to preview. Because the microclass has a voice function, students can watch the PPT while listening to the teacher's explanation. The development of microcourses is generally divided into four steps, as shown in Figure 2:

(iv) *Live Broadcast Using UMU.* The teacher sets the time for previewing the PPT and then shares the link to the group. Students open the live broadcast and video with the teacher at the specified time and communicate and discuss with the teacher what they have just previewed. If only one or two people do not understand, the teacher can explain in the video. If mmcl is a topic that everyone does not understand, the teacher can write down the key points to explain in class tomorrow. This method is convenient for supervising students' preclass learning and also allows students to grasp students' preview at any time. The live broadcast can be played back. If some students do not join on time, they can also log on to the platform for playback. Teachers can view the completion of students in the background app for easy detection. This way of the live broadcast can shorten the distance between teachers and students and make the monitoring of a preview effect more authentic than the way of simply letting students read messages and write comments.

### 3.4.2. Discussion in Class

(1) *Game Opening.* Computer and mobile app invite to participate. Large screen QR Code: in the classroom, you can participate in the interaction through the large screen QR code. Through UMU, you can have a more novel warm-up and opening and orderly and efficient question interaction. (2) *Initiate Interactive Discussion.* What do you want to say? What is your biggest feeling? What do you think is the importance of? What problems do you think should be paid

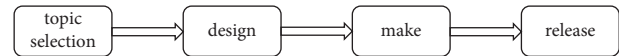


FIGURE 2: Development process of the microclass.

attention to? After students publish their answers on the platform, teachers can review them. In this way, not only can every student participate in the discussion activities, but also students can answer questions carefully to avoid perfunctory work. The teacher can choose to reply or reply to the microclass.

(3) *Initiate Interactive Questions.* At the end of class, after the teacher has finished the important knowledge points, students can ask questions. Some students are often ashamed to speak up or dare not ask questions to the teacher because of poor grades. The teacher can use the platform to check what students do not understand in class. For example, it is time to ask questions. Welcome to ask questions: do you have anything to ask the teacher about the topic? In this way, the problems can be solved in the class, and the problems will not be left after class.

(4) *Take Photos on the Wall.* Through the UMU platform, students and teachers can share photos on their mobile phones to the large screen to realize the rapid and real-time sharing of photo content. This way of sharing photos can often be used to show students' homework or to show discussion notes, etc., and the classroom is made more lively by allowing students to share photos, tell a story, and discuss a topic, thereby attracting their attention. It is suitable for a small topic, small knowledge points, and grammar items in English. It requires students to take the form of individual or group cooperation, make it before class, and display and summarize it in class, such as making posters.

3.4.3. *Consolidation after Class.* (1) *Job Settings.* In the operation phase, students can submit audio, video, and graphic assignments. Teachers can assign homework and put forward homework requirements through a paragraph of text in the homework link [22]. Students need to use the app to edit and submit assignments. Students can use pictures and words to create an article in the homework link, or use pictures and voice to form a dynamic audio with pictures, or shoot a video to submit as homework. Teachers can comment on the submitted homework at any time.

(2) *Video Sharing.* Teachers can share some videos suitable for English learning and course content from Tiktok or English learning websites and send them to students for learning activities in entertainment.

3.5. *Teaching Evaluation Design.* According to set teaching objectives, data analysis is conducted on various relevant data and teaching information involved in the teaching process, so as to make value judgment on the actual effect of teaching, true learning attitude of learners, and learning behavior of learners. The judgment process is called teaching



evaluation [23]. Teaching evaluation is an important feedback link in the learning system, which can play an important role in checking learners' learning results and encouraging and promoting learners [24]. The subjects of teaching evaluation are relatively diverse, but the main evaluation subjects are teachers and learners, and the evaluation objects are mainly students and the UMU platform. Formative evaluation and summative evaluation are mainly used to evaluate learners. The two are organically combined. Formative evaluation is mainly used in this process because the feedback of formative evaluation is given on time and can supervise the learning process in real time. In UMU umu interactive learning platform, formative evaluation is mainly tracked through discussions, questions, examinations, etc. Summary evaluation is mainly aimed at the final results of the final examination and the students' learning attitude. For the UMU learning platform, it is mainly to evaluate students' satisfaction after using the platform and the degree of interaction on the platform.

#### 4. Conclusion

The teaching design of English writing based on the UMU interactive learning platform breaks through the limitations of traditional teaching. The new teaching mode is combined with the traditional teaching mode, giving play to the advantages of the UMU interactive learning platform. For example, whether it is conducive to collaborative learning between groups in the actual learning environment. It is also important whether the learning model being explored can be carried out normally. At the same time, based on the UMU platform, teachers can conduct data analysis and statistics at any time before, during and after class, so as to give feedback at any time, adjust teaching strategies, and give overall guidance to the teaching process. Educational researchers are constantly exploring new educational and teaching methods. Starting from the most traditional face-to-face teaching, there are gradually various forms of online learning. These intelligent teaching methods have gradually changed our traditional concept of class and provided us with new teaching tools. By designing an English writing platform based on UMU [25], the author makes the following summary:

- (1) The popularity of the network and network equipment has increased the learners' acceptance of the UMU interactive learning platform, and most students can actively participate in the classroom.
- (2) For students, after the teacher releases the curriculum on UMU, students must pay attention to it and actively conduct teacher-student interaction, so as to better complete the predetermined learning objectives and better master the key knowledge. The submission status and the number of students on the list will be displayed on the large screen in real time, which helps teachers give timely feedback.
- (3) For teachers, using UMU will increase the workload of teachers, but at the same time, teachers are constantly encouraged to carry out classroom

innovation. Through reasonable and full use of various activities of the platform to carry out diversified teaching design, the traditional boring classroom will gradually turn to vivid, lively, and interesting, and it also has the function of performance detection and calculation, which can be counted as a part of the usual performance. It can see the completion of students at a glance and can also see the participation and completion percentage of students, so as to adjust teachers' teaching ideas.

First of all, students are the participants in the whole teaching process. They play a very important role in teachers' teaching and are also an important factor. The brand-new teaching method and the brand-new use of network equipment enable students to have a brand-new interest in the classroom. The key is to improve self-control ability, resist the temptation of the network, enhance the stability of attention, focus on classroom learning, and actively participate in classroom group discussions and questions. Teachers should take appropriate reward and punishment measures to punish students who do not cooperate in class or play mobile phones. Second, the teaching based on the UMU interactive learning platform is based on the mobile network equipment, which must be affected by the network. If the network environment is not good, it will inevitably affect the normal class progress, and it is difficult to ensure normal teaching work. Finally, the use and practice of the UMU interactive platform can effectively increase the interaction between teachers and students and inject new impetus into the whole class. However, it must be noted that this method is not applicable to all courses, so we must make a good choice, because if we make a wrong choice, it will cause great obstacles to teaching work. Therefore, teachers should reasonably choose whether to use this method for teaching according to the objectives and requirements of the curriculum. How to deeply integrate the contents of English textbooks and activities, and give better play to the work of the UMU interactive learning platform, is what educators need to consider and reflect in the future.

It has become an inevitable trend for information technology to enter the traditional classroom under the background of the current network era. It is imperative to improve the traditional teaching mode by using information technology. As a relatively new intelligent teaching tool, the UMU interactive learning platform is more and more used in classroom teaching because of its interactivity and the diversity and openness of activity design. However, we must constantly improve its internal functions, constantly acquire experience in practice, make its performance more optimized, and make better services for teaching work, so as to achieve the goal of teaching informatization. In the future, there will be more scholars and researchers participating in the informatization of education, which can really make practical contributions to the informatization of education, make good guidance for the informatization of education, provide better technology, and lay a solid foundation for the informatization of education. At present, artificial intelligence technology has been gradually applied to various fields

[26–29] and will have more extensive development in the field of education in the future.

## Data Availability

The dataset can be accessed from the corresponding author upon request.

## Conflicts of Interest

The author declares that there are no conflicts of interest.

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