

## Design and Application of Mixed Learning Model of Higher Vocational English Based on Rain Class

Zhixia Zheng

Department of Petroleum Engineering, Tianjin Petroleum Vocational and Technical College, Tianjin, 301607, China.

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**Abstract:** In today's highly developed mobile Internet and the widespread popularity of smartphones, especially in the era of rapid development and renewal of various new types of social media, the communication links between contemporary college students are more inclined to use "microblogging, WeChat, QQ, etc." "Mobile instant messaging (MIM) application" to achieve high-time, diverse information exchange. MIM applications have outstanding performance that can be used anytime and anywhere, and have great potential for creating a new learning environment to support learning. The mobile learning model is bound to become a popular new learning method among "digital generation" college students. In the past two years, various smart learning apps developed on the basis of smart phones have developed rapidly. They are represented by the "rain classroom", a smart learning platform jointly developed by Tsinghua University and Xuetang Online. They also include "Google Classroom" and "Super Star Learning Pass". "Blue ink cloud class class", "classroom class", etc., have been rushed to study and practice by colleges and universities. This paper is to apply the smart learning platform rain classroom to the practical study of mixed learning and teaching in the course of university compulsory course "University Physics".

### 1. Introduction

The hybrid teaching model was originally used for corporate training, and was later introduced to the field of education. Some people also called it Blended Learning. The term "Blended Learning" was also the earliest corporate training field in foreign countries. At that time, the traditional simple training method could not meet the expected benefits of the enterprise. Later, the training effect of the simple "E-Learning" training model and the economic benefits brought the foreign enterprise managers into deep thinking. In the continuous practice and exploration, in order to improve the economic efficiency of the enterprise, the traditional training methods and online network learning are organically combined to achieve the optimal training effect and improve the enterprise's income. The hybrid teaching came into being. The most intuitive understanding of blended instruction is the integration of information technology with traditional teaching models. Anthony's explanation of hybrid teaching is in both broad and narrow sense. Hybrid learning in a broad sense combines science and technology or media with traditional classroom activities.

The "Rain Classroom" jointly developed by Xuetang Online and Tsinghua University Online Education Office is a smart learning platform based on WeChat public platform. At the same time, it is not only limited to the use of smart phone WeChat platform, but also can be edited on the computer. Do a plugin for PowerPoint that connects the PPT and Rain Class by scanning the QR code. Before using the rain class, teachers need to download and install the computer version of "Rain Classroom". Teachers and students should pay attention to the WeChat public platform "Rain Classroom", and then the teacher creates a virtual class in the "Rain Classroom" to invite students to join. The instructor can prepare the relevant content PPT, test papers, voting, etc. on the computer before preparing for class, and then publish it to the rain class for students to prepare before class or class. In the rain class, the teacher can post tasks, test papers, PPT, etc. Students can sign in, vote, receive tasks, click "do not understand" on the courseware page that does not understand, mark feedback, conduct tests and get real-time feedback. The rain classroom can track the student's learning situation on its own, realize the process data collection, generate the classroom report in

time, for the teacher to check at any time, understand the student's learning situation, and appropriately adjust the arrangement of the learning content as the basis for the usual results. The more powerful teacher-student interaction function provided in the rain class (pre-study feedback, class barrage, etc.) enables a greater density of communication between teachers and students, enabling more efficient and effective communication.

## **2. Based on the hybrid teaching mode design of the rain classroom**

The new hybrid teaching represented by the rain classroom is obviously different from the online learning represented by MOOC and SPOC. In the mixed learning of MOOC, the distance between teachers and students is far away, and may be limited to online communication. Teachers do not understand students. Most of them are unfamiliar, and the focus is on students, so they can only be called mixed learning. In the new hybrid teaching mode based on the rain classroom, teachers and students are aware that the distance is very close. Teachers and students will use the rain classroom throughout. The rain classroom is equally important for teachers and students. Therefore, the new teaching method based on the rain classroom is for students to learn mixedly and for teachers to be mixed teaching. Singh & Reed has pointed out that blended learning is “choose at the 'appropriate' time, through the 'appropriate' technology application and the 'appropriate' learning style, to deliver the 'appropriate' knowledge to the 'appropriate' learner Ability to achieve a learning style that optimizes the effectiveness of teaching.” The purpose of blended learning is to improve learning by finding the “best fit” possible. First of all, what is “learning”? According to Wood, learning can be divided into two types, one is shallow learning, which is mainly characterized by memory, and the other is deep learning, which emphasizes proper acquisition and understanding of new knowledge, so that new knowledge and learners have knowledge. Coupling and integrating it into an existing knowledge framework (structure). Shallow learning is only concerned with the recall of information, which is an inefficient learning; while deep learning includes the learner's understanding of knowledge and digestion into a problem-solving learning. Clearly, blended learning is more in-depth learning for a variety of “appropriate” emphasis and expectations. In order to better promote the realization of effective deep learning, mixed learning adopts an inclusive attitude towards various possible learning methods, including context-based learning, activity-based learning, problem-based learning and even traditional classroom teaching. Wait.

The mixed teaching activities are mainly a combination of traditional classroom teaching and a combination of learning based on the rain class's WeChat public platform. The learning activities are designed to make the learning process smooth, reasonable and effective through reasonable activity planning. First, collect and develop the teaching resources that meet the learning objectives, and make reasonable edits to these resources on demand, and release them on time according to the plan to prepare for the teaching activities. In the early online learning environment, teachers were required to provide processed resource content to guide students' activities, and students used these resources to conduct independent learning. Combine online learning with traditional face-to-face content delivery, rational use, and optimize teaching. This hybrid teaching activity based on the rain classroom learning platform is designed to combine the advantages of online learning with the advantages of traditional learning, giving full play to the leading role of teachers in guiding, inspiring and monitoring the teaching process, as well as being the subject of learning. Learner initiative, enthusiasm, and creativity. In this mixed teaching process, it is mainly divided into three stages: pre-course, class, and after-school. In the pre-class preparation process, the teacher can post the preview content in the rain class, which can be the PPT and video of the related content, which can include a paragraph of text, a knowledge point, a few exercises or a website, etc. Students can present themselves in the question column. The problem can also be marked on the page of the PPT that does not understand, click the “do not understand” button to mark feedback. For the pre-study situation, the rain class can also be automatically summarized. After the teacher has checked in time, it can help determine the difficulty and difficulty of the class, and the pertinence is stronger. In the class, students can check the code first, and the rain class can record it by themselves; the teacher can click on the “not understand” part of the PPT before the teacher can teach the class. The class

can send the barrage to the students. Timely feedback; the teacher can post a limited-time class exercise, and the rain class can immediately summarize the student's answer and test the student's current knowledge. After class, students can review and consolidate according to the “do not understand” prompts marked by their own. The teacher can post relevant exercises to consolidate the knowledge learned on the day.

In the face of the complicated situation of students with different levels and levels, teachers need to master the learning situation of each student, and the workload is relatively large. In order to make the teachers work more scientifically and effectively, then make full use of modern information technology to carry out the teaching process. Scientific and effective management is imperative. The rain classroom platform can realize the functions of releasing task reminders, student organization management, daily learning effect management, and releasing results feedback. In the online and offline interaction process, the initiative enthusiasm of students to participate in learning activities is fully mobilized. The current classroom teaching is not only the face-to-face knowledge transfer in the classroom, it can run through every need of teachers and students, and the rain classroom makes it possible for this need to become a reality. On the rain classroom platform, teachers can create their own online classes to build virtual classrooms. The rain class divides the time into three parts: pre-class-class-after-class, and can track the learner data in real time.

### **3. Design and practice of teaching activities**

Before the class, the teacher prepares the teaching content first. According to the knowledge points to be taught, teachers can make PPT, test papers and other content in advance, and insert text, pictures, videos, audio and other content on the PPT. The rain classroom and the MOOC collaborate to provide a video of the MOOC and an online video. Students can view the lessons under the wireless network conditions. The rain class also has relatively complete ready-made rain courseware for everyone to learn to use. The teacher edits the PPT courseware in a timely manner, and can also add voice information as needed. The test papers issued by the teacher require a well-structured question in the setting of the test questions. They need to be closely related to the content of the course. The main focus is on knowledge-based learning. Before starting to study, students can first use the online course introduction and teaching plan provided by the teacher to systematically grasp the knowledge to be learned, including understanding the characteristics of the course, teaching methods, design ideas of the course, etc. The new curriculum forms a new cognition and builds appropriate concepts to guide students in the learning of new content, which in turn leads to meaningful learning. Students learn independently based on the learning resources released before the teacher's class and complete the test questions. Through the rain classroom feedback on the PPT and the summary of the student's test questions, the teacher analyzes the students' knowledge blind spots and prepares for the lectures. In addition, students can also send questions to teachers in the rain classroom PPT feedback area, study forum area or study group to help teachers understand the students' confusion. The intention of designing this activity is to cultivate students' self-learning ability on the one hand, and to provide timely and effective channels for teachers and students to explore feedback. This meaningful interaction has played a very positive role in effective learning.

In the class, the teacher explained the key points of knowledge according to the learning feedback and preparation content of the students before the class. The students established the relationship between the old and the new knowledge through the study before and during the class, re-constructed the knowledge system and formed themselves. New knowledge systems to achieve effective learning outcomes. Hybrid learning based on the rain classroom emphasizes the interaction between teachers and students in the class: First, the rain classroom sign-in function saves time and facilitates statistics. Secondly, the teacher in the class will focus on the feedback of the students' “I don't understand” part of the courseware; the teacher-student interaction in the class and the traditional face-to-face teaching will complement each other and complement each other. The traditional face-to-face interaction between teachers and students can be The limited number of students to be considered, the spark of knowledge of collisions is limited, and the rain barrage

function of the rain classroom can make up for this. Because the rain class does not have the name of the questioner, so that the shy students dare to ask questions, answer questions, participate in more students, have greater information density, and the timeliness and effectiveness of communication are stronger. Students go through the discussion process. Self-processing internalization can also have a deeper understanding of knowledge. The teacher can also arrange five or six minutes to conduct the barrage interactive answering questions, brainstorm and improve the teaching effect. What the teacher needs to do is to accept and use the barrage function from the heart. The learning tools are not good or bad, but the users are not used properly.

#### **4. Conclusion**

Traditional face-to-face teaching, online learning (MOOC, SPOC), flipping classrooms, and nowadays, a new mixed learning and teaching model represented by “rain classroom”, “blue ink cloud class” and “superstar learning pass”, educational research work. The people have never stopped exploring the pace of educational reform. As a new type of wisdom teaching tool, the rain classroom helps to teach, and in the specific practical teaching, it has been recognized by teachers and students. However, how to ensure that the rain classroom is fully utilized in mixed teaching and how to evaluate the impact on teaching requires more teaching practice to explore.

#### **References**

- [1] Jin Xin. Application Research of Medical Genetics Mixed Learning Model Based on “Rain Classroom” [J]. Basic Medical Education, 2018(1): 53-55.
- [2] Feng Wei, Wang Jian. Design of Hybrid Learning Mode Based on “Rain Classroom” [J]. Software Guide, 2019, 18(02):200-203.
- [3] Cheng Yun, Peng Jingxian, Yue Shufen, et al. Practice and Research of Hybrid Teaching Model of Histology and Embryology Based on Rain Class [J]. Education Modernization, 2018, 5(43): 260-262.
- [4] Fu Yanfang, Yang Hao. Mixed Teaching Practice and Effect Analysis of Mandarin Speech Training Course Based on Rain Class [J]. China Education Information Technology, 2018, 430(19): 73-78.
- [5] Wei Li. Practice and Research of Mixed Teaching Mode of Higher Vocational Sports Based on Rain Class [J]. Journal of Jiamusi Vocational College, 2017(6).
- [6] Ren Wei. Research on the Mixed Teaching Mode of Higher Vocational Education Based on Rain Class [J]. Journal of Yangtze River, 2017:247.