Analysis of the Application of UMU Interactive Platform in Micro-class-Case Teaching

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Abstract—In order to enhance the effectiveness of the micro-class-case teaching, the article proposes to use the UMU interactive platform to provide technical support for teaching. Through the analysis of the main functions of the UMU interactive platform, the main ways and important functions of the UMU interactive platform are explained. This paper analyzes the limitations of UMU interactive platform application and summarizes the main measures to improve the application effect of the platform, thus making the application of UMU interactive platform more effective in case teaching.

Keywords—UMU Interactive Platform, Micro-Class - Case Teaching, Application

I. INTRODUCTION TO THE UMU INTERACTIVE PLATFORM

UMU is an interactive learning platform that enables knowledge sharing and dissemination by Beijing Youmu Technology Co., Ltd. UMU Interactive Platform is a mobile Internet product specially designed for education and training institutions, corporate training departments, trainers and speakers. It is suitable for training, conferences, lectures, lectures and other occasions. This platform can organize classroom interactions with mobile phones at any time, display interactive results with large screens, and enable mobile Internet to actively train classrooms so that everyone can integrate, share and harvest, thus quickly improving teachers' training skills. The UMU interactive platform has the following main features:

1) The operation is extremely simple. It is possible to create an activity in a short period of time, edit it according to the needs of each activity, and provide support for teaching in a timely and convenient manner, which is very convenient and practical.

2) Students are easily involved. Students do not need to download, register or log in. Just open the mobile browser, enter umu.cn and interactive QR code to log in to the interactive platform and participate in teaching activities. The traditional interactive learning method has been changed through the mobile Internet, making communication between the two parties more convenient and smooth.

3) Unparalleled data are visualized. Display the interactive results on the big screen through the pager, transform student feedback into intuitive data in real time, and display it on the projector or on the big screen.

4) The focus topic is automatically presented. It supports the participation of a large number of students at the same time. The parallel speaking mode greatly enhances the efficiency of interaction and quickly finds the topic of high interest to the students on the spot.

5) Automatically store interactive data. Let the teaching process materials no longer disappear with the end of the course and can be exported for in-depth analysis at any time. In this way, the classroom can be used to organize classroom interactions at any time, and the interactive results can be displayed simultaneously on the large screen, so that the mobile Internet can actively train the classroom so that everyone can integrate, share and harvest.

II. APPLICATION OF UMU INTERACTIVE PLATFORM IN MICRO-CLASS-CASE TEACHING

Taking the "Modern Educational Technology" course of Beihua University as an example, the micro-course-case teaching method based on the UMU interactive platform was used in this course, and good teaching results have been achieved. Through the setting of each link before class, during class and after class, the interaction and communication between teaching and learning will be comprehensively improved.

1) Interact with students before class. The UMU interactive platform provides technical support for students to learn online before class. Under the premise of understanding the student communication information, the micro-course teaching case is sent to the students to watch in advance, prompting the students to preview the matters that should be paid attention to in the micro-course teaching case and emphasizing thinking in advance. This is also an important channel for collecting students' needs and questions. Through the exchange of the platform, pre-class answers can be realized. At the same time, the UMU is used to collect and export the scattered information, and the data of the students’ questions is "one-click export”, which facilitates further interaction and communication in the classroom and realizes systematic knowledge management.

2) Classroom check-in to understand student attendance. Before the lecture, the students came to the classroom one after another, reminding the students to enter the platform by scanning the QR code. The student's information will be displayed on the big screen, and the students who did not have the information did not attend the work. Through the setting of this link, on one hand, it is possible to grasp the student's attendance rate in time; on the other hand, it can understand whether the students
can skillfully use the mobile phone to access the Internet, scan code and other functions. In the case of using the flipping classroom (that is, the student learns through the online video in the class, the teacher is mainly responsible for answering the question in the classroom), you can control the flipping classroom, and by opening the sharing switch, send the link to the student to see if the student is participated in learning.

3) Use the ice-breaking question to collect the attention of students. Through the UMU interactive platform to set up the questioning session, guide students to focus on the teaching case to raise the focus of personal attention. After entering the link by entering the link or scanning the QR code, the student enters a personal opinion on the mobile phone page and clicks “Submit” to transfer to the platform, and to achieve a rapid convergence of the main issues students are concerned about in this case. In this session, the UMU interactive platform has a powerful platform display effect, and the interactive results are perfectly presented through the large screen, and the effect is shocking, which causes students to strongly resonate.

4) The group discussion and the photo on the wall organically combined to show the results of student research. Micro course – case teaching’s important teaching design is to carry out research seminars and exchanges through grouping and sub-role. After in-depth discussions, the teams formed the results of the seminar and reported the exchanges in the whole class. Although the results of each group's research may also be uploaded to the big screen by scanning the code, it is relatively fragmented and will interfere with the interaction between the team members. After the formation of the group results, the photo can be displayed on the wall, and a visual carrier can be provided in the whole class to realize the sharing of the whole class. The magnifying function and display effect of the photo on the wall are very recognized and welcomed by the students, and it is worth promoting in other training sessions.

5) The questionnaire is filled in to achieve the evaluation of learning effects. After the end of the micro-class-case teaching content, students will be asked to fill out the questionnaire to understand the students' evaluation of the lecture. Questionnaire topic setting should not be too much, generally 3~5 is appropriate, you can set objective choice topics or subjective topics, such as “what do you think about the effect of this lecture: A general, B is good, C is very good” and other topics to carry out evaluation. It is convenient to grasp the effect of teaching in time, understand the suggestions of students, and facilitate further improvement and improvement of teaching quality.

III. ANALYSIS OF PROBLEMS IN THE APPLICATION OF THE UMU INTERACTIVE PLATFORM AND COUNTERMEASURES

The application of UMU interactive platform has subverted the traditional teaching concept, which can effectively expand the teaching space, strengthen the teaching effect, and bring great convenience to the micro-class-case teaching. However, some limitations have been exposed during the use process, and it is necessary to fully understand the problem so that the function can be improved through other conditions to better realize the standardization and efficiency of teaching. First of all, UMU interactive platform pre-class interactive links, such as student information collection, research evaluation and other functions to achieve the premise of understanding the students’ QQ, WeChat, mobile phone and other information. This means that for newly developed classes, the above activities cannot be effectively carried out without the above information. In addition, using the UMU interactive platform, the host can use the desktop, but in the interactive session, the students use the mobile phone to scan the code to achieve interactive communication. This requires students to understand the relevant functions of the mobile phone and the enthusiasm of using the mobile phone. This form needs to strengthen the supervision of students' mobile phone usage and prevent students from using the mobile phone to operate regardless of the course. This requires the curriculum teachers to consciously control the scope of application of the software in the teaching process, and to design the interactive links closely with the course content to ensure the effectiveness of the course teaching.

Several measures to improve the application of UMU interactive platform: First, create a good network environment to maintain its stability; Secondly, learn about QQ, WeChat and other information in advance before class, and create conditions for interactive communication. Finally, set targeted interactive links according to student categories, timely feedback on students’ interaction results, and supervise the use of interactive student mobile phones.

IV. CONCLUSION

The UMU interactive platform provides educators with a new type of teaching method. Based on the UMU interactive platform case-micro-course teaching, students can learn in a new, attractive and creative way of learning. The content of the study is closer to the actual life of the students, and it is more able to meet the needs of the society for the cultivation of students. The implementation of the UMU interactive platform-based micro-teaching model in the “Modern Educational Technology Capability Training” and similar public courses highlights the subjective status of students' learning. This enhances the enthusiasm and initiative of students, and cultivates students' inquiry-learning ability and practical ability. This has significantly improved the practical ability of modern education technology in our school, and good teaching results have been achieved.

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