On-Line and Off-Line Teaching Mode: A Case Study of Web Development Course

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Abstract: From the conversion of online and offline teaching scenes, the interaction between teachers and students, the connection of courses and teaching stages and the complementarity of various teaching evaluations, etc., taking the web development course as an example, this paper puts forward the concrete practice path, in order to promote the organic integration of "Internet +" and professional teaching, and to promote the construction of the online-to-offline integrated teaching model, this is also the inevitable requirement to push forward the curriculum reform in colleges and universities.

Keywords: Web Development; Teaching Mode; Teaching Reform

1. The current situation of online and offline hybrid teaching in Chinese universities

At the present stage, almost all colleges and universities in our country have launched online, on-line and off-line hybrid teaching to varying degrees, the development of hybrid teaching fully reflects the scientific and technological means of education, education and communication information, modern teaching methods. In particular, on April 13, 2018, the Ministry of Education officially released the "Education Informatization 2.0 action plan," online and offline blended teaching in all types of schools, especially in colleges and universities as a shot in the arm, has made great strides. However, with the development of on-line and off-line blended teaching, the results of teaching are far from ideal, and the development of on-line and off-line blended teaching is not optimistic. As a new teaching method derived from the background of education and information, blended teaching is the comprehensive application of modern information technology based on computer, multimedia and network communication, in the process of development, there are still different opinions about the guarantee of learning effect, curriculum design, evaluation system and differential teaching. At present, our country is in the information-based high-speed development stage, the teaching way information, the information is the irreversible trend, the teaching information is also developing rapidly. The introduction of MOOC and flipped classroom has brought the teaching information into a new stage. Although the development of blended teaching in China is relatively late compared with that in some developed countries, and the awareness of blended teaching in all kinds of schools is still relatively low, there is still a lot of room for development in the future. With the more and more emphasis on the construction of educational information, the experience of the construction of teaching information in colleges and universities is more and more abundant. These will require teachers on-line and off-line hybrid teaching design, the professional level of the more and more high. So far, there is no unified model for the hybrid teaching reform in colleges and universities, but there is a unified pursuit.

2. On-line and off-line teaching mode

2.1 Teaching scenarios: Online and offline

The teaching scene changes from the traditional classroom (offline teaching) or online classroom (online teaching) to the combination of online teaching and offline teaching, and then gradually, to the combination of online teaching and offline teaching, so as to realize from single, the transition from a scene to a two-line scene. In order to adapt to the integration of online and offline, and the demand of teaching mode, colleges and universities need to carry out the construction of normal teaching resources, the platform lays the foundation for the transformation of ubiquitous teaching scene, thus realizing the seamless joint of on-line and off-line scene learning.

2.2 Subject of instruction: Teacher and student

On-line and off-line integration of teaching mode must determine the teacher-led, student-oriented teaching structure, the establishment of two-way interaction between teachers and students. Based on the two demands of teaching basic knowledge and pushing learning resources, teachers should update online resources in time, which is helpful for students to study many times and make rational use of their spare time, to investigate and fill the gaps, heavy and difficult point consolidation and capacity training. This kind of teaching mode will liberate the teacher from the stylized teaching, concentrate on "Guidance", guide the student to start, guide the student to think, guide the student to discuss, guide the student to innovate.

2.3 Stage of instruction: Before, during and after class

Corresponding to the course knowledge goal, ability goal and quality goal, the teacher may create the knowledge, ability, quality three-dimensional fusion path which the on-line and the under-line fusion teaching pattern, constructing the multi-dimensional teaching mode of "Learning before teaching, multi-combination, collaborative learning and interactive discussion".

2.4 Teaching evaluation: Formative evaluation and summative evaluation

The traditional teaching evaluation mode has single form, over-dependence, terminal price, and lack of dynamic evaluation and process evaluation. Under the teaching mode of online-online-offline integration, teaching evaluation should be changed from one examination system to multiple, formative and process-oriented, covering three stages of pre-class, mid-class and post-class, to realize the complementarity of formative assessment and summative assessment, so as to reflect the actual situation of the teaching subject in the online and offline teaching activities, this kind of teaching evaluation can embody the teaching goal of "Knowledge + ability + quality", and provide the basis for the implementation of the model of on-line and off-line integrated teaching.

3. The exploration and practice of on-line and off-line integrated teaching mode

Taking the web development course as an example, colleges and universities can reconstruct the teaching system of online and offline courses by innovating the contents and forms of the course, carrying the course, continuously perfecting the course construction scheme, constructing the online course resources, etc., explore on-line and off-line phase, the integration of teaching mode.

3.1 Pre-term

In preparation for the start of the semester. Teachers can absorb the experience and lack of the previous round of teaching, keep up with the changes in the economic and trade situation, improve the teaching resources on the online learning platform, enrich the offline teaching content, and formulate teaching, planning, to lay a foundation for the implementation of the online-to-offline integrated teaching model.

3.2 Mid-term

That is, the concrete stage of teaching implementation is the core link of the online-to-offline integrated teaching and the implementation of the model.

3.2.1 The pre-class period

According to the teaching plan, the teacher can set the class, the teaching task, the online learning platform release the teaching arrangement and carry on, the guidance. Students can form the basic cognition to the teaching content after completing the online video (teaching content video, case video, video), and initially complete the knowledge goal of the course teaching.

3.2.2 Mid-course

Before the off-line class begins, students can use the learning-through platform to complete, objective quiz, test the effect of pre-class learning, and enable teachers to get timely feedback on the answer. Teachers should give full play to the role of guidance and guide students to integrate into teaching activities. First, the knowledge of the content of the teaching, the department to comb the whole, to avoid the fragmentation of the pre-class learning, students lack of macro-control of the teaching content. Second, the emphasis on teaching, learning difficulties, combined with the online test situation of students to help students consolidate teaching knowledge. Third, combine offline teaching with online teaching, organize students to engage in discussions related to trade hotspots, and increase students' initiative and enthusiasm to participate in class activities by rewarding them with classroom credits, realizing the ability goal of the course teaching.

3.3.3 After school sessions

After students have finished the exercises on the learning platform, they can discuss and realize the student-student interaction, teacher-student interaction, and consolidate and strengthen their knowledge application ability. Teachers can set up section tests, hot cases, analysis, expand reading and other links to provide students with rich learning resources, focus on the coordinated development of students' knowledge, ability and quality. In this, the end of a stage of teaching, teachers should reflect, summarize the stage, experience and deficiencies, for the next unit of teaching activities to provide reference.

Before class, in class and after class three stages constitute the basic teaching unit. With the development of teaching activities, on-line and off-line integration of teaching mode in each teaching unit in the practice of continuous improvement.

The students' learning situation in the middle of the semester is the key to the formative assessment. The assessment includes students' initiative, completion, participation and mastery of knowledge, reflected in the course of video learning, course discussions, course tests, course assignments, classroom activities, etc., all from the online and offline student teaching activities feedback.

3.3 End of term

At the end of the semester, students can complete online standardized test, and offline non-standardized test, constitute a summative assessment. The former, the content of the main objective questions, the main examination of the knowledge level of students. The latter is the traditional form of the final examination, combined with the teaching cycle and courses related to the domestic and foreign economic and trade issues to test, students' ability, quality level. Based on the examination and study of the students in this teaching cycle, teachers can carry out teaching reflection, which will lay a solid foundation for the improvement of teaching contents and the innovation of teaching methods.

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