

Research on SPOC Teaching Model based on Moodle

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ABSTRACT. Moodle teaching platform is widely used at home and abroad. This paper explores how to develop the SPOC hybrid teaching mode on Moodle platform, and design the teaching process from four processes: the preparation of SPOC hybrid teaching, the design of online and offline courses and resources, the design of teaching activities, and the design of teaching evaluation. The core of educational informatization is the deep integration of information technology and education and teaching. This paper focuses on the curriculum design of distance and open education, and combines Moodle, a popular curriculum design platform, with hybrid teaching. Based on the complementarity of online learning and face-to-face tutoring, this paper expounds the internal relationship of the mixed teaching mode, and puts forward the design principles of Moodle curriculum, which accord with the teaching mode of distance and open education. This paper makes a concrete analysis of the design process of Moodle network course, and hopes that this paper can be a good starting point for the extensive open education teachers to carry out in-depth research.

KEYWORDS: moodle, blending teaching and learning model, course design, SPOC

With the rapid development of information technology and network technology, the close connection between Internet and education, and the influence of new technology and new thinking, the traditional teaching mode of school being promote and reformed. Both the ways of teaching and the ways of learning have changed. Whether we can improve the teaching efficiency and benefit, enhance the students' learning interest and autonomous learning ability, reduce the difficulty of students' learning, and is the main measure index to evaluate a teaching model and method. Also is this kind of teaching pattern whether the long-term development applies the

fundamental place.

1. Related concepts

1.1 Brief introduction to Spoc

As a typical curriculum paradigm in the post-Mooc era, Spoc (small scale restricted online course) not only inherits the educational ideas of Mooc and teaching design, but also suits the practical needs of colleges and universities. In terms of openness and scale, only online classes are open, teaching classes fixed, students' knowledge structure synchronized, and their professional background is similar. The form of evaluation is multivariate evaluation mechanism, mainly process evaluation and summative evaluation. Building more on Development Strategies Moodle is one of the most widely used open source educational software in the world because of its high efficiency, ease of use and low cost. It is a network-teaching platform designed based on constructivism learning theory. An object-oriented dynamic learning environment based on modularization built, which can organize network teaching and learning freely like building blocks. The modularization and object-oriented design based on the platform can easily modify and edit the corresponding modules, and facilitate the adjustment and optimization of teachers, managers and developers. Teachers and students are flat in the platform's teaching activities Moodle platform provides technical and quality guarantee for research and application of hybrid teaching.

The SPOC teaching model based on Moodle based on the modern educational theory such as constructivism, which combines the advantages of classroom teaching, SPOC and network teaching platform. Combine all kinds of teaching resources, teaching methods, teaching tools, teaching techniques and teaching environment. Pay attention to the organic combination of teaching classroom environment and network teaching environment, complement each other's advantages, give play to teachers' leading role and students' subjectivity, and then improve teaching effect and promote students' learning ability.

2. Design of Spoc Hybrid Teaching Mode

2.1 Early preparation

The study object analysis mainly includes the student's age, the specialty, the need for learning, the proficiency of applying Moodle platform, the attitude of mixed learning and so on. The cultural foundation of students in higher vocational colleges is relatively weak and abstract theoretical knowledge is difficult to master. Therefore, it is particularly important to make full use of the advantages of Moodle platform to carry out teaching in accordance with their aptitude. Course content analysis, by deconstructing the course and analyzing the course teaching content, can put on the Moodle platform the knowledge points (skills points) which are easy for students to self-study or which are suitable to present through animation or video resources, so that students can communicate with each other. Cross-line self-learning is conducive to self-study student's master, while training student's self-study ability. Through the analysis of the teaching contents, the knowledge points (skills points) which are not easy to self-study handed to the teachers, and the learning is directed in the classroom. The analysis of learning environment shows that the mixed learning environment is the basis of carrying out mixed learning and the guarantee of carrying out mixed learning. We should try our best to construct a mixed learning environment suitable for teaching and learning by making use of the opportunity of constructing the intelligent campus of school information.

2.2 Online and offline course design and resource development

The basic idea of online curriculum design and resource development is the overall design. Under the premise of respecting intellectual property rights, it is possible to invoke and transfer high-quality resources on the Internet, and at the same time gives full play to students' initiative. The skillful application of the platform is the premise of mixed teaching for teachers and students. The platform needs special online training courses for teachers and students to train their applied literacy. The design of the overall framework of the course involves the syllabus, teaching objectives, the division of teaching knowledge points, the presentation of important difficulties and so on. Development of Micro video Resources: micro video is the most important and difficult part of the course the mode of explanation is the core of the whole course resources. (1) Interactive activity design: homework,

forum, test, examination, etc. (2) other resources development: PPT manuscript, courseware, literature, expanding resources, etc. According to the teaching content, teachers of offline classroom design can combine the platform and classroom teaching activities organically. They can choose the flipping classroom teaching method, the theme inquiry teaching method, the group cooperation teaching method, the skill training teaching method. Many teaching methods, such as role-playing teaching method, combined organically, thus reflecting a more democratic, scientific and rational teacher-student relationship.

2.3 Teaching activity design

Give play to the main body of students, teacher-led role. Through the content guide student to carry on the micro video study, meets the content, which knows a little can carry on the study discussion, after studies carries on the clearance test, then grasps the foundation teaching content. Through big data platform analysis, teachers explain the common key points, timely feedback students, teachers and students, students interactive exploration, and then expand the application of innovation. After class, feedback promotion combined with online and offline learning content for after-class testing, learning to expand knowledge, teachers and students to communicate.

2.4 Teaching evaluation design

Evaluation consists of process evaluation and summative evaluation. The evaluation of process assessment is to evaluate the results of students' micro-video views, homework quality, contribution rate of participation discussion, classroom performance, teacher feedback, self-evaluation and so on through the summary and analysis of big data on the teaching platform. Summative assessment, mainly through the final examination, actual reports, works to reflect. The final assessment = process assessment * 60% final assessment * 40.

3. Implementation of Spoc mixed Teaching process

At present, colleges and universities have completed the construction of digital

campus, providing a software and hardware environment for teachers and students to carry out hybrid teaching. The schools wired and wireless network can fully cover. Teachers and students can teach and learn in classrooms, offices, libraries, training rooms, dormitories, homes and so on through multimedia computers, mobile phones and so on. As the main body of teaching, students study activities in the platform, browse the course notice to see the course content of the chapter, master the basic content through micro-video learning, complete the related homework and knowledge point test, participate in the mixed learning activities. Cooperate with students, group and evaluate. Teacher's work In order to lead teaching, organize teaching activities in the platform, issue course notice, manage teaching content, design learning resources, develop and publish micro-video resources, manage homework and test, organize mixed learning activities. Use platform big data's summary and analysis, carry on the process examination to the student.

4. Significance of SPOC Teaching Model Research based on Moodle

This teaching mode is helpful for teachers to know more about the students and to teach more pertinently. At the same time, the active learning of the students promoted, and the enthusiasm of the students is higher. The specific analysis is as follows: from the teacher's point of view, the teacher fully understands the problems existing in the students' study before the class, through the feedback information of the students' post-video test and the questions rose by the trainees, so the teacher carries on the targeted teaching design. Improve teaching efficiency. In response to students' questions, the teacher has sufficient time to prepare and find relevant information, so that he can give more satisfactory in the class, and the students will gain more from it and will be more willing to teach. Members ask questions, but also love learning, forming a virtuous circle. Therefore, this teaching mode enables teachers make efficient use of time for help students solve real problems. Teachers can also use more feedback to improve their teaching level. Of course, this kind of teaching mode obviously increases the pressure to the teacher; the teacher must prepare the video carefully, check the student feedback, answer the student question, consult and correct the massive composition and the student comment on the platform and so on. Teachers will devote more time and effort to the course and will gain more.

From the point of view of the students, the students have already carried out the video study of the course before the class, and have completed the related tests, raised the question, that is, they have thought and prepared the teaching content very fully before the class. In class, students are easier to keep up with the progress of teaching, more willing to pay more for learning, students really fall in love with questions, fall in love with classroom, love learning. In addition, students have more than 30 minutes of deep interaction in class, which can greatly improve the students' enthusiasm and initiative to participate in the classroom, improve the students' oral expression ability and group cooperation ability.

5. Several thoughts

The basic purpose of the mixed teaching mode is to promote the reform of "teaching mode" and "learning mode", to improve teaching efficiency and efficiency, to enhance students' interest in learning and to reduce the difficulty of students' learning. In the practical application, we should pay attention to the following points: (1) the school needs macro-level policy guidance, consummates the related mechanism, may adopt the carrot big stick policy to promote the hybrid teaching. (2) Breaks the heavy technology application light teaching design, Design varies according to curriculum, no best only suitable, the same technical application is the same. (3) at the micro level, strengthen the training of teachers' information literacy, teach them to fish, improve teachers' production skills. (4) Break down barriers, teamwork, play their strengths and gather wisdom. Insist on quantitative change to qualitative change for a long time; insist on the popularization and application of hybrid teaching, from external cause drive to internal cause drive. (5) In big data's time, learn to apply the platform big data analysis, Feedback to improve the revision of the various processes of mixed teaching design. (6) Adhere to the establishment of an open mind, in the contribution to obtain. Learn to make good use of social resources, only for my use. Learn to share good resources.

6. Conclusion

The hybrid-teaching model based on SPOC platform is a flipping teaching mode that combines online learning with classroom teaching by using modern information

technology. This teaching mode is helpful for teachers to teach more pertinently, and for students to be more active and active in learning.

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