

Construction of Guiding-type Blending Teaching Model Based On SPOC

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Abstract. Because the problem that the MOOC is lack of process monitoring and the emotional communication between teachers and students is more and more prominent, SPOC ,the miniaturization of MOOC form is becoming more and more popular, How to organic integrate of online and offline teaching is a focus in the study of this article. On the basis of Blending teaching, this paper proposes the design strategy and the framework of guiding-type blending teaching model based on SPOC.

1. Introduction

The dissemination and promotion of MOOC makes people realize the openness and richness of education in the information age, But its shortcomings are gradually revealed, such as lacking of access mechanism, low completion rate, procession without monitor and so on. The combination of Online teaching and traditional teaching is starting to get everybody's attention. It is a combination of traditional classroom teaching and the advantage of online teaching, the core is fusion of all kinds of teaching media, teaching methods, teaching service platform and the learning environment. In this context,SPOC arises at the particular moment, It not only retains the idea of open education and advanced teaching design thought of MOOC, but also combines the advantages of face-to-face classroom teaching, thus it is able to provide complete learning experience for students, which ensures the quality of teaching.

Therefore, it has practical significance that how to introduce SPOC course to physical classroom and to build a suitable blending teaching mode. On the basis of blending teaching based on SPOC, this paper explores and constructs guiding-type blending teaching model which is suitable for the military academies and schools.

2. The related concepts and theoretical basis

2.1 SPOC

SPOC,short for Small Private Online Course, the biggest characteristic is that it has limited access conditions for the learner groups in terms of relative MOOC, it is open to learners who meet the requirements , which means privacy. Learners' scale is commonly dozens to hundreds of people, which is usually one or more entity class on campus.

At the same time the piracy of SPOC is suitable for military academy which needs strictly confidential information security, because independent SPOC platform can ensure the safety of the military information confidential from physical scale, and can carry out the required information teaching.

2.2 Guiding learning

As people have been studying online course learning support service system deeply, the role of network guiding-learning is becoming more important. In the network teaching, the separation of the teachers and students makes learners lack of teaching constraints and control, it means higher requirements of the learners' autonomous learning ability. Based on this, the network learner is in an urgent need for online learning guide and assist, in order to collaborative online learning process.

2.3 Blending teaching

Blending teaching also called blending learning ,although the presentation of blending learning from research scholars is not identical, but there is no essential difference between the understanding of blending learning. Summarized in terms of blending learning is a kind of learning mode in the fusion of online learning and classroom teaching, which fully play the advantages of both, and make good use of learning resources and time effectively, so as to attract the students' learning enthusiasm, and cultivate self-study ability and cooperation inquiry ability.

3. Strategy of guiding-type blending teaching model based on SPOC

There is no special innovativeness in SPOC itself, it is as an important part of informationization teaching, which makes the whole teaching activities become more personalized and efficient, therefore when doing teaching model building ,the following aspects should be paid attention to.

3.1 Learner-centered

Information age proposes personalized learning, which is the different characteristics from the traditional teaching. In the process of building blending teaching mode ,it should pay attention to highlight student's principal status. On basis of the students' personalized features and demands, By means of the flexible learning medium, learning time and methods to choose, it guide students to active learning and develop students' principal status.

3.2 Resource diversity

In blending teaching mode, teaching resources must be diversified, which is the basis for students' self-study before and after class , and is presupposition of flexible teaching online. Resources can be introduced from MOOC's mature content, also teachers can homemade.

3.3 Systematization

Personalized learning is emphasized in guiding-type blending teaching model based on SPOC, but it doesn't mean to ignore the teaching activities and systematicness of teaching contents, fragmentation of flexible learning time and knowledge needs systematic design and guidance of teachers, in order to achieve the teaching goal eventually.

3.4 Diversity in evaluation

Because blending teaching includes online learning before and after class, so it can't use traditional examination grades for assessment, students' all kinds of performance at each stage need to be considered, evaluation should reflect the students' learning ability , learning attitude and collaboration with others and so on, such diversity evaluation is more objective on one hand, on the other hand it can be personalized to the student evaluation, as teachers can adjust teaching in each part to form a positive feedback.

4. Analysis and design guiding-type blending teaching model based on SPOC

With reference to the existing blending learning design steps, summarizing the experience of forefathers' research, based on the understanding and awareness of the blending teaching, three aspects as the previous analysis, teaching design and assessing is taken into consideration in this paper, in order to guiding-type blending teaching model based on SPOC framework.

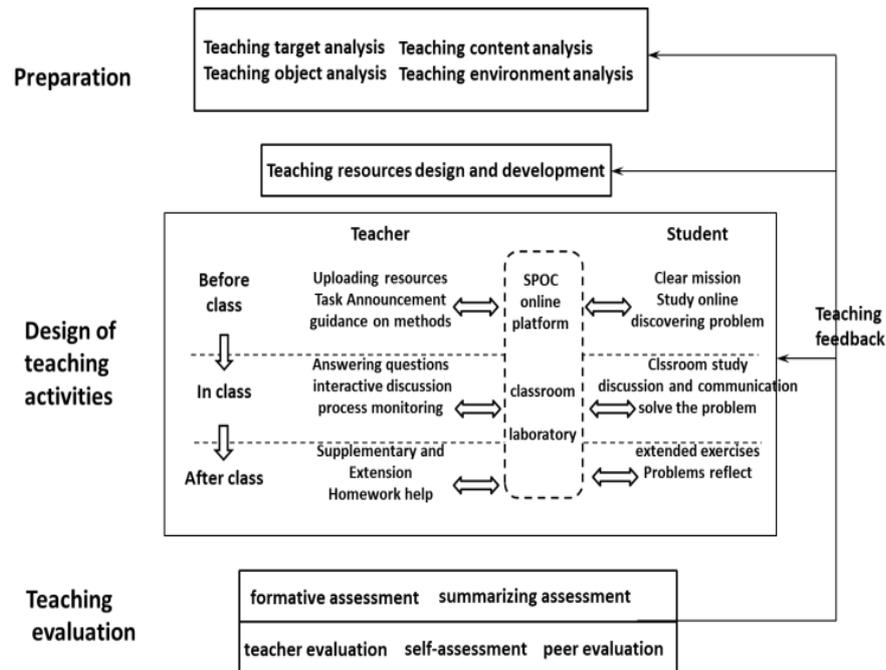


Fig. 1. Structure of blending-teaching model

4.1 Preparation

Preparation including teaching target analysis, teaching objects analysis, teaching contents analysis and environmental analysis, etc. And on this basis teaching resources can be designed and developed.

4.1.1. Teaching target analysis

Teaching target is explicit expression for specific behavior that can be achieved after a series of learning activities, it is the core in the whole teaching process, so the target-setting is the key link, which is part of the teaching evaluation basis and determine the specific learning behavior. Teaching target formulation must be reasonable, low goal setting will lead to learners' motivation insufficient, while high goals can make learners lose confidence, so the target must be in the learner's recent development zone.

4.1.2 Teaching object analysis

Teaching object analysis is to understand students' original knowledge level, cognitive structure, psychological development level and the situation of the learning style, it is to analyze the learner's initial capacity, general characteristics and information literacy. The learner's initial ability refers to learners' knowledge and skills before the teaching activities, as well as the related knowledge and attitude.

4.1.3 Teaching content analysis

Teaching content analysis refers to the expression of the learners knowledge, skills and behavior experience on the basis of the teaching target. Teachers can choose the relevant teaching methods only after identifying various types of knowledge and the corresponding teaching goal, so as to design the appropriate teaching activities.

4.1.4 Teaching environment analysis

Teaching environment is the external conditions which affect the learners' learning, it not only can promote significance of learners' actively knowledge construct, but also help learners to generate learning ability. Teaching environment is relative to teaching mode that teachers conduct, and will affect the teaching effectiveness and efficiency.

4.1.5 Teaching resources design and development

Teaching mode of blending learning resources is of diverse characteristics, teachers and students select the appropriate resources for learning according to the actual need. There is three design and development pattern for learning resources in SPOC, which respectively is to completely introduced directly use of existing resources, to the introduction of existing resources and transformation, to product and integrate learning resources construction all by self.

4.2 Design of teaching activities

In blending teaching, both teacher's dominant and the subjectivity of students should be considered. The teaching of the teachers' teaching activities should not be limited to traditional teaching or let the students study all by themselves in the pure monotonous under the network environment, it should help the student to obtain more abundant learning experience, to support students with various forms of learning. Teachers need to design a variety of learning activities both online and offline, in order to help students to complete learning goals. The blending teaching model built mainly from three links, classroom before class, after class to expand the teaching activity design.

4.2.1 Before class

In preparation process, the teacher has already know about the students' general characteristics, basic ability and information literacy, before the class teacher needs to arrange contents corresponding teaching SPOC resources for students for learning, which lay the foundation for learning activities in class, teacher's identity is students' learning guide and auxiliary.

The teacher prepared the lesson in advance, teaching plan is made according to the teaching contents and teaching target. And then the teaching resources can be designed, while determined what knowledge is suitable for traditional classroom teaching and what knowledge can be achieved through the SPOC platform, finally building completely teaching resource database. After that teacher will put up task notice on SPOC platform to inform students. And after students seeing task list, they will watch video or teaching textbooks for preparation, and finish homework assigned by the teacher, then ask questions that encountered in the process of preparation ,which will collected by the groups.

At the same time, the teacher monitors students' the learning process online, platform provides for teachers with the SPOC class statistics, including the class accessing record and video, courseware browsing history, by which teachers can know students' participation and completion of online learning. Teachers can put forward the problem to the students through the test before class or to test the learning process and result, and in this way teacher can interact with students in the process and provides them guidance and learning methods, in order to achieve the best effect.

4.2.2 In-class

Face-to-face teaching in classroom is the most important part in blending teaching activities, so in the design and implementation process it should also attaches great importance to this part.

In this stage, teachers must transform their role from the main body of traditional classroom teaching to supervisors and the organizer of classroom, the students transform from passive part into the main body of learning in class, the main steps of classroom teaching includes: explanation of the difficulties and key point in course content, coaching and answering questions; Heuristic guidance for learners; real-time monitoring and feedback on student's learning process and learning situation; Discussion and collaborative learning with students; discussion of the learning tasks with learners together; providing guidance for independent learners who can't solve the problem. The whole process is a dynamic continuous process, according to the learners' feedback from platform information teachers should timely improve the courses and take appropriate measures.

4.2.3 After class

After class, students' main task is to further consolidate knowledge. Teacher can put the difficulties , key point in course content and questionable knowledge points onto the platform, for students to review. At the same time, the teacher should release the homework and knowledge test to check the students' learning effect and to give personalized guidance.

In the process of problem solving, the students learned to achieve mastery through a comprehensive study of knowledge, as well as improving understanding and using of teaching content, and can discovery problems and shortcomings by themselves with timely reflection and improvement, so as to improve the self-learning ability and level.

4.3 Teaching evaluation

In guiding-type blending teaching model based on SPOC teaching evaluation plays an important guiding role, which not only reflects the students' learning achievement, but also has the meaning of

guidance and feedback on the whole teaching. Guiding-type blending teaching model based on SPOC, it integrates multiple evaluation forms. Besides the traditional teacher evaluation, main body of evaluation includes students' self-assessment and some parallel evaluation to peer in the learning process; Evaluation includes formative assessment and summarizing assessment, which mainly contains the students' homework and test before class, the frequency of discussion and speech, classroom participation, the completion of expansion work after class and so on, these indicators can reflect the students' learning ability, learning attitude, and various aspects of the ability to collaborate, all these will finally be counted into the final score according to certain proportion coefficient statistics, teacher can adjust the preparation of various contents and resources, and modify the part of teaching activities, eventually it will improve the quality of teaching.

5. Conclusion

Teaching activity in informationalization should give full play to the advantages of information technology, this paper studies guiding-type blending teaching model based on SPOC, put forward the corresponding design strategy, practical operation in accordance with the three phase ,preparation, teaching design and teaching evaluation. The paper explores the road for practical application of personalized teaching under the condition of informationalization. Through SPOC teaching reform, it promotes the teachers from simple imparter of knowledge into knowledge learning guide and the organizers of the free discussion, students also turn from passive recipients into a self learning managers and practitioners of knowledge innovation. At present, the concrete course based on this model is about to enter the actual teaching, we will further tracking the subsequent application.

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