

# Construction of SPOC Teaching Model for the Pharmaceutical Preparation Equipment Course<sup>1</sup>

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**Abstract:** As for the actual teaching courses of higher vocational colleges, there is a corresponding gap between the teaching resources and teaching staff of higher vocational colleges and ordinary colleges and universities. Therefore, when carrying out a series of courses, in order to shorten the influence of this factor on student teaching and realize the development of higher level and quality of students, Higher vocational colleges begin to integrate the SPOC teaching model into the relevant education courses of higher vocational colleges. Through the construction of SPOC teaching model, students can complete the supplementary learning of relevant content knowledge by using the high-speed development of Internet technology, and finally realize the high-quality mastery of theoretical knowledge and the learning process of students. The teaching course of pharmaceutical preparation equipment has carried out a tentative integration process of SPOC teaching mode. Practice has proved that the construction and application of SPOC teaching mode in the course of pharmaceutical preparation equipment in higher vocational colleges can effectively help students to learn related knowledge.

**Keywords:** The pharmaceutical preparation equipment course; SPOC teaching model; Construction

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The Chinese name of SPOC teaching model is small-scale restricted online course, which mainly enables teachers to implement a mixed teaching process of in-class teaching and online teaching of network resources relying on the Internet. This kind of teaching course has a very significant impact on the current teaching process of higher vocational colleges in China. It can effectively bridge the gap of teachers and teaching resources between higher vocational colleges and ordinary colleges and universities, so that students in higher vocational colleges can also feel the teaching content and teacher resources of corresponding courses in ordinary colleges and universities or key universities, so that students can better complete the learning of due knowledge. Based on the analysis of the role of SPOC teaching model in pharmaceutical preparation equipment course, this paper specifically explains how to effectively construct SPOC teaching model in pharmaceutical preparation equipment course of higher vocational colleges.

## 1. The function of SPOC teaching model in the course of pharmaceutical preparation equipment

### 1.1 Expand the teaching content in this teaching class

An obvious feature of SPOC teaching mode is that teaching resources and contents are extremely rich. By constructing SPOC teaching mode in the course of pharmaceutical preparation equipment, many corresponding course resources from the Internet can be projected into the teaching process, which can greatly enrich and expand the teaching capacity of teachers in the course of pharmaceutical preparation equipment. Also due to the limitation of higher vocational teachers' knowledge and educa-

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tional background, their understanding of pharmaceutical equipment courses is slightly different from that of first-class teachers and professors in colleges and universities. However, SPOC teaching mode can be used to project the relevant teaching courses of first-class teachers and professors in colleges and universities into the teaching courses of pharmaceutical equipment through video. Can form a kind of teaching content supplement, promote the development of vocational colleges related professional courses.

### **1.2 Help students complete the learning process from other pedagogical perspectives**

After most teachers are familiar with the teaching courses and the actual situation of students, they will choose a fixed teaching perspective to carry out the study of various teaching courses. Such a fixed teaching perspective can eliminate the dispersion of students' learning energy caused by the difficulty in adapting to different teaching perspectives. However, this fixed teaching perspective restricts students' viewing of relevant theoretical knowledge, which makes students only solve different problems in accordance with the same way of thinking and thinking, and also limits the smooth development of corresponding teaching content and teaching courses. Although the teaching course of pharmaceutical preparation equipment has high practical knowledge, However, it is precisely because of this characteristic that many times, when exploring corresponding practical problems, many different solutions can be derived from different perspectives and ideas of examining problems. If teachers only have a fixed teaching perspective to teach students, students will also be bound by this fixed teaching perspective. Finally, the students and talents cultivated are only modeled and mechanical professionals, rather than talents with creative and practical abilities. Therefore, the construction of SPOC teaching mode in the teaching of pharmaceutical equipment related courses can help students apply the teaching perspective of different classrooms to complete the study of corresponding problems and improve the level of students in all aspects.

### **1.3 Promote the informatization development of the pharmaceutical preparation equipment course**

The present era is an era of rapid development of information technology. The construction of SPOC teaching model in pharmaceutical preparation equipment courses of higher vocational colleges can promote the informatization development of pharmaceutical preparation equipment courses and make the teaching content of pharmaceutical preparation equipment courses more full of the connotation of the development of The Times. It is also an effective way to help the relevant professional courses of higher vocational colleges to enter the further future and become more academic.

## **2. The guiding strategy of SPOC teaching model in the course construction of pharmaceutical preparation equipment**

### **2.1 Teachers can choose appropriate of the teaching resources**

In the construction of SPOC teaching model in the course of pharmaceutical preparation, the first point is to enable teachers to select teaching resources on the network based on the corresponding course content. Teachers are required to select and use the corresponding teaching resources. If the selected teaching resources are in line with the curriculum standards and teachers' own teaching tasks and objectives, Teachers not only use the corresponding teaching resources to complete the teaching of relevant knowledge and help students improve their level and ability, but also achieve the value of the corresponding teaching resources in the network. Therefore, when the construction of SPOC teaching model of pharmaceutical preparation equipment course is carried out, Teachers must be based on the actual teaching content to select suitable video resources for students to learn and watch to teach relevant knowledge.

In the selection of relevant teaching resources, a comprehensive analysis of resources and objectives should be carried out to effectively select teaching resources with strong academic content and strong practical value, and those teaching contents with high value and practical value should be reflected in the actual learning process of students through this screening method.

### **2.2 To realize the echo of online and offline teaching**

The construction of SPOC teaching model in the course of pharmaceutical preparation equipment is mainly presented in the way that teachers can supplement the content of short version of knowledge in offline actual teaching class for students to complete through online teaching courses, or allow students to complete the preliminary mastery of relevant content through online teaching knowledge learning in advance, and then teachers can supplement it through offline teaching, the purpose of online teaching in the former teaching method is to strengthen students' understanding and mastery of relevant knowledge and enable them to complete knowledge learning through self-selection and supplement, while the latter teaching method is to give full play to students' independent learning ability and enable them to initially learn and master relevant knowledge through independent exploration and learning, when encountering problems, teachers supplement and deepen the continuous development of practical courses through offline courses. This teaching process not only gives full play to the initiative of students, but

also reflects the guiding value of teachers. Both of these two teaching states can give full play to the existence value of relevant teaching resources in information technology and help students complete the learning process, however, no matter what kind of teaching mode and use method, it is necessary to realize the echo of online teaching and offline teaching, which is the premise of the construction and application of the teaching mode.

### **2.3 Establish feedback mechanism of knowledge hole, to make up for students' knowledge deficiencies**

The application of SPOC teaching mode in most teaching courses reflects the role of making up for students' knowledge weaknesses. In the actual process, many students are hard to realize which knowledge is in the blind spot and which knowledge is their own weaknesses in the actual learning process, so it is very necessary for teachers to help students establish a corresponding feedback mechanism for knowledge vulnerabilities. Teachers can use a few minutes before the end of the class to construct the knowledge mind map of the class. By constructing the knowledge framework, students can recall the relevant knowledge of the whole class. Then, students can find the unfamiliar knowledge blind spots through reflection and summary to present and explore the knowledge loopholes of students. Let students master the framework structure of the course knowledge, deepen students' understanding of the knowledge of this course, and make students' learning more in-depth.

### **2.4 Based on the characteristics of the curriculum, start the construction of SPOC teaching model**

Different course contents have different emphases in the exploration and construction of SPOC teaching mode. The course of pharmaceutical preparation equipment is a subject to study pharmaceutical preparation equipment on the basis of mechanical theory. By enabling students to master the corresponding structure of pharmaceutical preparation equipment and master the corresponding basic operation and maintenance methods of equipment, etc. Therefore, the construction of SPOC teaching model should be based on the teaching purpose and characteristics of the course, and the students' logical thinking and practical operation ability should be applied to the construction of the model, so as to realize the deep integration of SPOC teaching model and pharmaceutical preparation equipment course.

## **3. Conclusion**

To sum up, in the actual teaching process of pharmaceutical preparation equipment courses in higher vocational colleges, in order to optimize teaching courses according to the construction of SPOC teaching mode, teachers should first select appropriate teaching resources from the rich and diverse teaching resources to complete the first step based on the actual teaching content and tasks, then, when teachers apply the corresponding teaching resources, a kind of echo between online teaching and offline teaching will be formed, so as to implement the role of online teaching resources in the teaching of students in the SPOC teaching model. In this process, teachers also need to establish the corresponding knowledge loophole feedback mechanism, so as to help students find their own knowledge blind spots and corresponding knowledge loopholes, the most critical point is to build SPOC teaching model based on the characteristics of pharmaceutical preparation equipment course, only by making SPOC teaching model conform to the characteristics of pharmaceutical preparation equipment course, can SPOC teaching model be more vigorous and practical.

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