Research on the Construction and Application of Online Teaching Course Resources in Higher Vocational Colleges

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Abstract: The problems such as quality deviation and insufficient application of various resources of online courses in higher vocational colleges seriously restrict the improvement of teaching quality and affect the implementation effect of online teaching. From the four aspects of course resource design, course resource development path, online teaching application mode, application evaluation mechanism construction, this paper puts forward effective methods and application measures, which provide strong support for higher vocational colleges to build high-quality online course resources and implement high-quality online teaching.

Keywords: Higher vocational colleges; Online teaching; Resource construction; Teaching application

Online teaching[1] refers to a teaching and learning mode in which the teacher imparts knowledge and skills to learners by means of live online class, remote explanation and demonstration, and interactive teaching, using the digital course resources developed and constructed in advance and the online teaching platform as the medium with the help of information technology, and the learners learn the corresponding tasks online. Although it has the advantages of unlimited learning time and space and flexible learning content, it also has some problems such as difficult to control the learning process and difficult to identify the authenticity of learning effect evaluation. However, the students in higher vocational colleges are affected by such factors as lack of self-discipline in their learning habits, lack of active learning initiative, and lack of independent thinking ability. The construction of high-quality online course resources with interesting and visual features, the improvement of teachers' online teaching application ability, and the construction of effective online teaching evaluation mechanism are in line with the learning needs of students in higher vocational colleges in the new era. It is a powerful guarantee measure to carry out online teaching and promote the effective improvement of online teaching quality.

1. Curriculum resource design ideas

The goal of resource construction for online courses[2] is to display the knowledge and skills of the course in the form of videos, documents, pictures, etc. Resources should have the characteristics of strict logic, systematic from simple to complex, high visualization degree, fragmented knowledge and skills points, etc.

1.1 According to the characteristics of the course, choose the real product design of the enterprise

The curriculum system of talents training in higher vocational colleges mainly includes four types, such as professional core, professional foundation, humanistic quality and professional expansion. For the core, foundation and expansion courses of majors, real products of enterprises should be selected as the teaching carrier. Combined with the real production process of products, the knowledge and skills of courses should be divided into tasks to design corresponding resources, which can be different products of different enterprises for different courses or real product carriers covering multiple courses. The construction of a comprehensive curriculum system covering knowledge and skills is convenient for students to establish a complete work idea. For the humanistic literacy course, the humanistic literacy required in the production process of enterprise product carrier of the above-mentioned professional courses is classified and divided, and it runs through the teaching design resources of humanistic literacy course.

1.2 Systematically divide curriculum knowledge and skills according to cognitive rules

In the division of knowledge and skill resources of the course, we should not only divide the content of the teaching carrier carefully, but also carefully analyze the cognitive law of students, follow the cognitive law from simple to complex, from shallow to deep, from the surface to the inside, so as to determine the presentation type of knowledge and skill point resources covered by the course.

1.3 Integrate ideological and political thinking into the curriculum to cultivate students' comprehensive professional quality

In the resource design of integrating ideological and political elements into professional courses, the focus is on a comprehensive analy-

sis of top-level requirements such as norms and standards covered by the course, and a careful analysis of specific literacy requirements in each task of the course. Ideological and political resources should correspond to the specific task content of the course, and the deeds corresponding to the task implementation requirements of craftsmen in major countries can be selected to cultivate students' craftsman spirit of excellence. Negative cases such as adverse results caused by violation of standards during task implementation can also be selected to cultivate students' qualities such as standardized operation and cost saving.

2. Curriculum resource development path

In view of the supporting role of the curriculum docking professional talent training program, as well as the knowledge and skill requirements covered by the curriculum, this paper comprehensively analyzes the learning interests and preferences of current vocational college students, determines the presentation mode of corresponding digital resources[3], and then develops and develops them to enhance the application effectiveness of their resources.

2.1 Picture resources

Pictures are an important component of online teaching course resources, which are mainly used to assist in the explanation of knowledge points. In terms of the production method of picture resources, you can use the corresponding software to design and produce, or you can refer to existing picture resources. Regardless of the method, it is necessary to carry out targeted design according to different types of characters, scenery, flow charts, etc., to ensure that the corresponding knowledge and skills of the course tasks can play an auxiliary role in explaining and explaining.

2.2 Document resources

The resources of document type are mainly applied to the knowledge description of the course. In the aspects of font selection, paragraph division, title highlighting, language conciseness, typesetting format, etc., standard and beautiful can be ensured. When it comes to the accuracy of the text, make sure that the technical terms are used properly and not by a hair.

2.3 Exercise resources

Exercises mainly provide intensive training of knowledge and skills for online teaching courses, and need to be developed and designed specifically for questions and difficulties raised by students in the process of online learning, so as to ensure that students can consolidate their knowledge and skills.

3. Online teaching application model

Online teaching mainly takes the network teaching platform as the medium, through which teachers carry out teaching activities such as task arrangement, attendance checking, discussion and communication, data statistics, question answering and assignment publishing. Students use the platform to complete task-related resources to learn independently, issue difficult problems, interactive communication, answer questions and other learning activities, and then build a two-way learning exchange online teaching application model, to promote teaching and learning to achieve excellent results.

3.1 Before class

Teachers complete the construction of resources on the teaching platform, and target the specific tasks of the course on the platform Prepare lessons for class, and release learning tasks, learning methods, and learning content to students. Students receive corresponding tasks on the platform, and use videos, exercises, tests and other resources before class to complete independent learning, and post the questions found in the topic area of the task. The teacher collects, collates and statistically analyzes the students' task learning feedback, and makes corresponding solution planning.

3.2 In class

Teachers use the teaching platform to check attendance, classify students' learning feedback before class, and explain students' learning questions before class, combined with pre-class answer planning, and make use of corresponding auxiliary supporting materials and resources, by carrying out teaching activities such as knowledge response and topic discussion, to create a relaxed and pleasant teaching scene. Students actively participate in solving learning questions, and conduct practical operation training for skill operation tasks. Teachers give process guidance and interact with students, complete task summary and assign homework.

3.3 After class

After class, students complete their homework online, consolidate and improve their knowledge and skills, and discuss and exchange relevant difficult problems online. Teachers summarize and reflect on the teaching situation before and during the course of this task, form a summary report, and provide solid reference materials for the subsequent development and application of resources.

4. Construction of application evaluation mechanism

The evaluation of the learning effect of online teaching[4] is to improve the motivation of students' learning initiative, and it is of great importance to design a quantifiable and operable evaluation mechanism. The evaluation mechanism mainly includes two parts: process evaluation and final evaluation, which are calculated by percentage system, accounting for 50% proportion respectively. The process evaluation mainly refers to the evaluation of the learning state and situation of knowledge and skill points of each task in the course. The final evaluation mainly refers to the evaluation of the outcome of the curriculum learning task. According to the pre-class, during class and after class, the proportion of online learning results in the comprehensive score assessment of the course is designed. The quantitative assessment rules are designed by relying on the intelligent statistical analysis function of the online teaching application platform, and a practical and operational evaluation mechanism is constructed.

4.1 Process evaluation

In the process of online teaching, teachers and students participate together, and build a two-way learning environment. In the learning process, students should set the corresponding evaluation ratio according to each learning stage, which mainly includes homework (10%), classroom interaction (15%), check-in (5%), course video learning (15%), course tests (15%), participation in classroom teaching and other teaching activities (15%), discussion (10%), and examination (15%). All are evaluated automatically by the platform.

4.2 Final evaluation

The final evaluation mainly focuses on the quality of the completion of the final outcome of the learning task, which is tested online Test results (50%) and actual results such as documents or works (50%) are composed of two parts. For the online examination results, the intelligent statistical evaluation function of the online teaching platform is used to complete the score assessment. For the actual achievement, the detailed achievement quantification standard is set for different course types, and the teacher evaluates the achievement.

5. Conclusion

The digital resource of online teaching course is an important carrier of online teaching process in higher vocational colleges, which directly affects the quality and effect of teaching application. In the process of online teaching application, students' learning characteristics should be reasonably analyzed, and a closed-loop online teaching model should be constructed to help improve students' learning initiative, so as to promote students to achieve excellent learning results and achieve substantial improvement of teaching quality.

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