



Development and Creation of Open Online Course Resources in Tourism Colleges from the Perspective of School-Enterprise Collaborative Education

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Abstract. The mode of teaching and learning in the “Internet+” era is undergoing changes. In order to adapt to the development of the times, the state has promulgated corresponding informatization policies to promote the reform of college education and teaching methods. Both online learning and hybrid learning play an important role in college education and teaching, and online open course resources are indispensable to hybrid teaching and online teaching. From the perspective of school-enterprise collaborative education, the article takes “Front Office Service and Management”, an Excellent Open Online Course of China, as an example, and elaborates on online course team establishment, principles of development of online course resources, content selection, resource type creation, and creation experience summary, shedding light on how to develop and improve open online course resources in tourism colleges.

Keywords: School-enterprise collaborative education · Open online course · Resource development and creation

1 Introduction

In June 2016, the Ministry of Education of the People’s Republic of China issued the “Guiding Opinions on Deepening Education and Teaching Reform in Universities under the Central Government”, requiring the colleges affiliated to the Ministry of Education to vigorously step up efforts to create open online courses, and provided funding and policy support. In 2017, accreditation of the first group of “Excellent Open Online Courses of China” was commenced and 490 Excellent Open Online Courses of China were officially launched [1, 2]. In the “Internet+ education” environment, teaching has become inseparable from the Internet, with online learning and mobile learning becoming important ways of learning. In recent years, through continuous reflection on online education, more and more experts and scholars at home and abroad believe that the hybrid learning model combining online learning and face-to-face learning will become inevitable in future education. Hybrid teaching can effectively make up for the advantages and disadvantages of traditional teaching and online teaching models in their full sense, and

result in optimal allocation and integration of educational resources. Due to organic combination of the two models, building of new types of teacher-student relationship and deepening of the concept of multi-method interactive learning have become important trends. However, high-quality online course resources are a basic condition for hybrid teaching. Therefore, in line with the course creation concept of school-enterprise collaborative education, we urgently need to solve this issue: How can tourism colleges bring enterprises into play, and, in light of courses' characteristics and students' characteristics and from the perspective of meeting the needs of online teaching and hybrid teaching, reasonably build an online course resource framework, elaborately design the content of online courses, and develop and create online course resources with the enterprises so as to contribute to O2O (online to offline) school-enterprise hybrid teaching and improve the efficiency and quality of tourism education?

The members of the “Front Office Service and Management” course team adhere to the course creation concept of school-enterprise collaborative education [3]. In 2017, the “Front Office Service and Management”, an Excellent Open Online Course of Jiangsu Province, was officially launched. With the course, non-student learners can learn online, receive guidance and get answers to their questions free of charge; in addition, the course provides strong support for implementation of hybrid teaching by teachers in the school. After launched, the course has been highly spoken of by the students, other tourism colleges and experts. It was accredited by the Ministry of Education as an Excellent Open Online Course of China. So far, the course has been delivered for 7 semesters, and the number of students choosing the course has reached 22,876. With timely and accurate online guidance, the course focuses on sharing and application, and strives to share high-quality teaching resources with non-student learners [4].

2 Establishment of an Online Course Team

The creation of an online course should be undertaken by school teachers with support from teachers from the enterprise. There should be members who understand the course and those who are proficient in Internet technology [5]. At the same time, the student team can also play a role, helping the teachers organize, upload and supplement resources. The online course leader needs to determine 3–5 core members from the school as the main teachers of the course, and the number of teachers from the enterprise can be increased according to the needs of the course content. If the development period granted by the superior is relatively short, in order to ensure the quality of the course, the course team can be expanded. The course leader needs to know the professional expertise of existing professional teachers and teachers from the enterprise, and then perform ability matching and screening according to the needs of the course content.

3 Development and Creation of Online Course Resources

3.1 Basic Principles

Student-Centered

The course team needs to design and develop online course resources from the perspective of students, including the determination of teaching goals, the design of teaching

content, the organization of teaching activities, and the formation of teaching evaluations. Teaching should be carried out in line with how students think.

Alignment of the Course with Professional Standards

The course team needs to adhere to the concept of school-enterprise collaborative education, align the course with professional standards, cause the course to embody the “Four New” and integrate industrial culture into the course. The content of online courses should fully reflect the work development requirements of professional positions in enterprises, cover the new knowledge, new technologies, new processes and new methods in the industry and enterprises in a timely manner, and introduce the work specifications and standards of well-known international and domestic enterprises so as to broaden students’ professional vision, enable students to learn knowledge and improve abilities in school which meet the requirements of front-line technical work for production and management work, and fully reflect the characteristics of the times.

Problem-Oriented

The design of the teaching content and teaching activities in the course should be, if possible, guided by the actual problems encountered at work in the enterprises. Through problems which are increasingly difficult, the students are guided to learn and think and try to figure out how to solve real problems facing the enterprises. In this way, the learners’ interest in learning is simulated.

Task-Driven

Knowledge is applied by completing the actual work tasks of the enterprise, and the corresponding learning tasks are created according to the work tasks of the enterprise, and become increasingly difficult as the students learn more complicated knowledge. In the process of completing different levels of tasks, students can not only solve problems but also gain satisfaction and self-confidence from learning; therefore, their interest in learning is further stimulated [6].

3.2 Selection of Course Content

“Front Office Service and Management” is a professional core course that combines theory and practice. It teaches both theoretical knowledge and useful practices. The types of resources are also rich and diverse. Following the four principles of course resource design, the course team and the hotel front office staff select the online course content by taking into account the characteristics of the course, the students’ academic performance and the typical tasks of each position in the front office.

Front-End Analysis of the Course

The course team needs to clarify the course’s positioning, understand its status and role in the talent training program, clarify the teaching objectives of the course, and set specific quality objectives, knowledge objectives and ability objectives of the course. At the same time, it is also necessary to analyze the online course’s main target audience. Generally, online courses have a wide audience. Therefore, the content design of the course should take into account the learning needs of learners at different levels. It is

recommended that course content with different levels of difficulty be designed so that students can selectively learn based on their own learning goals and needs to improve learning efficiency and satisfaction.

Analysis of Typical Work Tasks

Based on the characteristics of the “Front Office Service and Management” course and the analysis of students’ academic performance, to give full play to the advantages of teachers from the enterprise, the school and the enterprise jointly analyzed the abilities required for each position in the hotel’s front office, jointly determined the typical work tasks of each position in the front office based on professional abilities’ characteristics and professional job skill standards, eventually selected 22 typical work tasks as the knowledge taught in the first stage of the front office open online course, and built a preliminary course content framework.

3.3 Creation of Course Resource Types

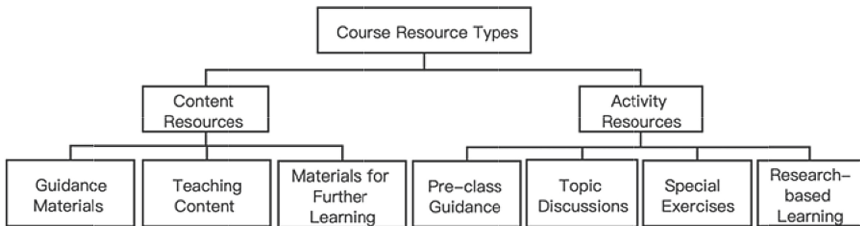


Fig. 1. The course resource framework

The course resource framework can be divided into two parts: content resources and activity resources (Fig. 1). The content resources mainly include guidance materials, teaching content, and materials for further learning. The activity resources mainly include pre-class guidance, topic discussions, special exercises and research-based learning [7]. According to the course content, and in light of the design modules of the online teaching platform, the school and the enterprise have designed the following resource framework for the online course “Front Office Service and Management”:

Design of Content Resources

Guidance materials: Guidance materials mainly include two parts: basic information on the course and common problems, so that students can know the basic information on the course and how to solve the problems encountered in the learning process. The course introduction includes course name, start time, class schedule, course overview, teaching objectives, course outline, preparatory knowledge, reference materials, instructors, and assessment standards; common problems are the common problems that may be encountered when taking the course, which are usually problems concerning types of learning method, and generally do not involve specific learning content, such as resource release time, completion deadline, what to do if a unit test is missed, whether a certificate will

be issued, and how to ask questions. Generally the questions and answers are shown in the course introduction page.

Teaching content: teaching resources provided around the knowledge that needs to be mastered in the class, such as teaching videos, teaching courseware, teaching pictures, lectures given by enterprise experts, display of student works and test question databases.

Materials for further learning: content which is related to the content taught in the class and intended to expand the knowledge so as to meet the needs of different types of learners, mainly including reading materials, online materials, business cases, professional English, and supporting textbooks.

Design of Activity Resources

Pre-class guidance mainly aims to enable students to know the content of the course to be studied and the requirements and prepare for study in advance. A course announcement can be made. For the online course on front office, a welcome letter and the teaching plan for this semester are released before the start of the course, and learners receive learning guidance, reminders, etc. during the learning process. We can also provide a pre-class guide at the beginning of each unit to let students know the main knowledge to be learned in the project and clarify the learning tasks, important and difficult knowledge, do's and don'ts, learning suggestions, recommended reference materials, etc.

Topic discussions are discussions on the key points, difficulties, questions, knowledge tested in examinations and other issues related to the current chapter. The content for this part is more flexible. The teacher can post 2 meaningful topics for classroom discussion based on the main content of the unit to guide students to actively share opinions and suggestions, stimulate learners' enthusiasm for learning, and increase their participation in learning [8]; the teacher can also post a thread for topic discussion based on more advanced knowledge related to this unit for students who have the ability to engage in more in-depth learning and thinking; at the same time, there shall be a teacher Q&A area, in which students can ask questions about what they feel uncertain at any time, and the teacher should answer all of such questions online as soon as possible. Meanwhile, students' questions should be sorted out and common questions should be further explained in classroom teaching. In addition, students can also encourage the teacher or provide the teacher with pertinent suggestions through course evaluations so that course teaching can be further improved in the future.

Special exercises mainly include targeted exercises on newly learned knowledge. Pre-class test, in-class questioning, unit test, homework, social practice, online final test, etc. are options available. Pre-class tests enable students to know their weaknesses in learning; in-class questioning, that is, questions will pop up when students watch the video, tests the efficiency of students' learning; unit tests test their understanding and mastery of new knowledge; through homework, social practice, etc., students apply the knowledge learned to solve practical problems so as to "do during learn" and "learn by doing" [9]. Online final test comprehensively tests the students' mastery of the main knowledge taught in the course; at the same time, the teacher performs a corresponding data analysis based on the test results and reflects on the problems existing in the online teaching process.

Research-based learning mainly means that, focusing on one theme, students engage in inquiry-based learning in groups. In the course, group work is assigned to each group (composed of at least 2 persons), and students are required to apply the learned knowledge to the actual work scenarios in enterprises, write a scenario simulation script, perform it and submit it. At the same time, each person is required to evaluate and score at least 6 groups of students. Research-based learning activities can strengthen communication and learning among peers, enhance their learning interest, improve learning efficiency, and reduce the loneliness in the learning process [10].

4 Discussion

4.1 Adhere to the Concept of School-Enterprise Collaborative Education

The teaching goal of the front office course is to enable students to master the knowledge and skills required by various positions in the front office of a hotel and be competent for all tasks in the front office of a hotel. Therefore, the active involvement of enterprises can make the courses more standardized and professional. In the creation of the resources of the Excellent Open Online Course of China “Front Office Service and Management”, the course team has always adhered to the concept of school-enterprise collaborative education, which is mainly reflected in the joint front-end analysis of the course, the selection of course content, and the designated course syllabus; the school and the enterprise have jointly developed video resources for the course; course theories are mainly taught by the school teachers, and skill operation videos are mainly completed by the front office staff of the enterprise; the school and the enterprise have jointly developed more advanced course-related resources, such as case database and teaching materials.

4.2 Create Three-dimensional Supporting Resources

To create a good online course, we must do a good job in creating supporting resources for the course, so that the content-based resources for the course can be hierarchical, and the activity resources can be interactive and challenging. In addition to basic course materials accumulated over the years, the front office online course is also equipped with teaching cases and key textbooks jointly compiled by the school and the enterprise. At the same time, there are high-quality courses and bilingual courses. In addition, according to the results of a questionnaire survey conducted by the course team, the most popular new form of media for teaching among students is WeChat official accounts, followed by all kinds of mobile phone APPs, short video platforms, microlectures, and communities (QQ groups). Therefore, in the future, the courses will be available on more new forms of media, bringing more diverse online and offline teaching resources for many learners (Fig. 2).

4.3 Enhance Learner Stickiness

The course leader should follow up with the production progress according to the online release schedule, especially the coordination of shooting of teachers from the enterprise.

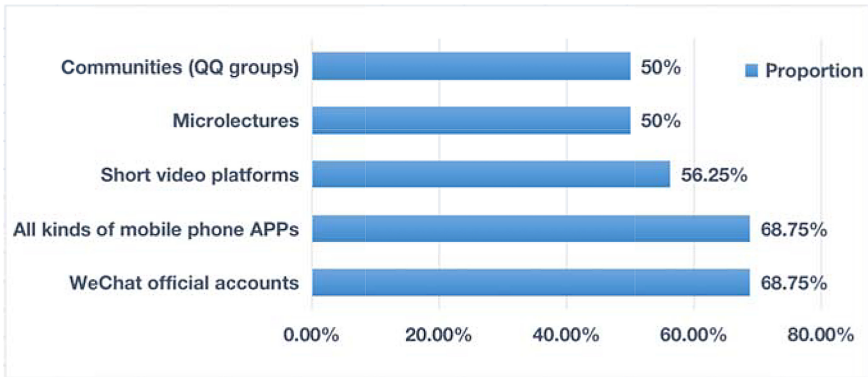


Fig. 2. New forms of media for teaching which are popular among students (students can choose more than one option)

Teachers need to complete detailed teaching design before recording a course video, write a micro-course shooting script and create a PPT file. The shooting script contains the course shooting ideas and course content, and the script for each knowledge point needs to be revised many times. A knowledge lecture video is not a condensation of an actual classroom lesson, but must be refined and designed in a way that meets the learning and psychological characteristics of the students, so that it can be in-depth and vivid, and can “stick” to the students [11]. Enterprise personnel can be invited to participate directly in the teaching. Their explanation of real enterprise projects can bring the classroom and the enterprise closer. PPT files should be illustrated and be concisely worded.

4.4 Create Fragmented Knowledge Points

According to research, when using the Internet and pockets of time to learn, most people pay attention to new content for no more than 15 min. Therefore, it is recommended that teachers control the duration of a knowledge point within 15 min (preferably 8–10 min) [12]. The average speech speed of general teachers is 200 Chinese characters/minute; thus, within 15 min, the number of Chinese characters in the speech should be controlled within 3,500 Chinese characters wherever possible. This requires us to split a completed knowledge system into several knowledge points, that is, fragmentation. Although the content of the course is divided into details, it is still a complete knowledge system after being integrated. Each video is short, and the content is the essence [13].

4.5 Continuous Update through School-Enterprise Collaboration

Generally, a MOOC requires about 600 min of videos, which need to be made gradually and cannot be completed at once [14]. In the first stage, the main unit knowledge points of the course should be identified first, and then the school should discuss with the enterprise how to further optimize the course knowledge system. When it comes to online course resources, more isn’t necessarily better; instead, the resources must be necessary and

sufficient. It is recommended that resources be used while being created rather than after completion; more expensive resources are not necessarily better, and the key is to be recognized by learners. According to the development and service requirements for the open online courses of China for the next five years, the front office course team needs to continuously improve and upgrade the existing online course resources, such as gradually increasing the content on operation of the enterprise Opera PMS system, and gradually increasing professional English terminology and bilingual teaching videos; the school and the enterprise should work together to continuously update course resources, that is, in the process of continuous deepening of the integration of industry and education, new progress in position research, new experience in practice development, and new changes in social needs are incorporated into online course resources in a timely manner through school-enterprise collaborative teaching and research to continuously improve the course, bring learners cutting-edge information on the industry and broaden learners' professional vision [15].

The development and creation of open online course resources are a long-term process of continuous improvement. From the perspective of school-enterprise collaborative education, tourism colleges should stick to the main principle of "school-enterprise collaboration", give full play to the advantages of tourism enterprises, bring in enterprises' work standards, teachers, teaching resources, working environment, etc., and create and share course resources with the enterprises and peer institutions so as to continuously improve the quality and visibility of the courses.

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