Research on the Construction Path and Optimization Strategy of Online Open Courses in Hongshan College

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ABSTRACT

This study is based on the online open course of Nanjing University of Finance and Economics Hongshan College. First of all, it analyzes the necessity of online open course construction in colleges and universities. Secondly, it introduces the background of online open course construction in Hongshan College. Thirdly, it explores the four processes of online open course construction in Hongshan College, including team division, construction steps, teaching design and teaching mode. Then, it summarizes the construction achievements and application of online open courses in Hongshan College. Finally, three optimization strategies of online open courses in Hongshan College are refined.

Keywords：Hongshan College, Online open courses, Construction path, Optimization strategy.

1. INTRODUCTION

With the continuous development of Internet technology and information technology, informatization has been integrated into all walks of life, which has greatly enriched and facilitated people's study, work and life. With the advent of the information age of education, new teaching modes such as online open courses have been born. In recent years, more and more universities have completed their own online open courses.

2. NECESSITY OF ONLINE OPEN COURSE CONSTRUCTION IN COLLEGES AND UNIVERSITIES

The value and significance of constructing online open courses in universities are mainly reflected in the following three aspects:

2.1 Comprehensively Deepening the Integration and Innovation of Information Technology and Education and Teaching, and Promoting the Teaching Reform in Colleges and Universities

In recent years, driven by the background of "internet plus", online courses have developed rapidly. By the end of 2019, there were nearly 13,500 online open courses, more than 1,000 universities participated in the course construction and application, 250 million students took online open courses, and about 82 million students received massive open online course credits. [1] This trend has promoted the further improvement of universities with better online course construction, and driven universities with lagging online course construction to keep up with the trend, learning, building and using now. Therefore, the construction of online open courses has comprehensively deepened the integration and innovation of information technology and education and teaching, and promoted the teaching reform in all colleges and universities. [2]

2.2 Improving Teachers' Online Teaching Skills and Cultivating Students' Online Learning Ability

Online teaching poses a great challenge to teachers, especially older teachers who are not familiar with information technology. In order to carry out online teaching smoothly, college teachers need to participate in all kinds of training related to online course construction, study all kinds of online teaching platforms such as Love Course, Superstar Learning Link and Rain Classroom, and learn to use all kinds of online teaching software such as Tencent Conference, Tengyun Classroom and Nailing. After a period of study, college teachers can use all kinds of online teaching platforms and software from birth to maturity, and their ability to control online classes is from unfamiliar to familiar. Online learning makes students look at blackboards and projections instead of computers, mobile phones and other terminals. The original teacher's face-to-face lectures, interactions and questions-answering become separated from the screen, and students cannot receive timely feedback. This puts high demands on students' learning ability. After a period of online course study, students will gradually adapt to the mode and rhythm of online learning, and their learning ability and academic performance will be improved to some extent. Therefore, the construction of online open courses in colleges and universities has improved teachers' online teaching skills and cultivated students' online learning ability.

2.3 Creating Superior Courses and Sharing High-quality Teaching Resources

Online courses invested by colleges and universities are all their own excellent courses or superior courses. In the construction of these online courses, colleges and universities can invest high-quality teachers and curriculum resources. After the online open course is built and launched, it can be continuously improved, iteratively updated and upgraded to a national quality course. These high-quality online open courses can not only be used for students to learn, but also share the high-quality teaching quality of our school with the whole society and improve the visibility of courses and universities.

3. BACKGROUND OF ONLINE OPEN COURSE CONSTRUCTION IN HONGSHAN COLLEGE

In 2017, the Ministry of Education launched the first batch of 490 "National Excellent Online Open Courses", marking the beginning of the application era of online open courses. From 2017 to 2018, the competition for the identification of national excellent online open courses is more intense, the information of course team members is more detailed in course application, and the explanation of course assessment methods is more specific, which aggravates the investigation of teaching process, teaching content and teaching effect; Paying more attention to the quality of teaching, in addition to examining the content and operation of the course, the dimension of social influence, especially global influence, of the online open course is also increasing, and the practical application of the course has become an important investigation factor. From the geographical distribution of the results in 2018, it can be seen that Jiangsu, Beijing, Hubei and other regions occupy the first place in the list, among which Jiangsu Province jumped from the seventh place in 2017 to the region with the largest number of selected schools and courses in 2018. The number of schools in the western region continues to increase, and Qinghai Province and Xinjiang Uygur Autonomous Region have also been selected for the first time. In 2013, Tsinghua University, as the first domestic open online course, based on the open source code of open-edX, built the first independent massive open online course platform-Xuetang Online, which has been at the forefront of online open course construction in China. The number of courses from application to certification has increased greatly, which represents the continuous expansion of the acceptance of online open courses in the whole society, and more and more students and people in the society have recognized this educational method. Vigorously promoting the construction, application and promotion of online courses has become the main way to make up for the shortage of educational resources and the shortcomings of unequal education, and has become an important means to promote the improvement of teaching quality and educational equity. In 2017, the Ministry of Education launched the first batch of 490 "National Excellent Online Open Courses", marking the beginning of the application era of online open courses. From 2017 to 2018, the competition for the identification of national excellent online open courses is more

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Hongshan College in 2019 in Jiangsu Province, colleges and universities online open course declaration, 9 courses were approved. This is the first time that Hongshan College has been approved as a provincial online open course, and it is also the first time to build an online open course. After these nine courses were approved, at present, all the preliminary construction of online open courses has been completed, and four courses have been put into operation in massive open online course, China University. It is necessary to study the construction value of online open courses in Hongshan College, and it is of great significance to explore its next optimization strategy. Therefore, by studying the

value and optimization strategy of online open courses in Hongshan College, and by studying the digital educational resources and educational service platform spawned by "Internet+Education", with the concept of "openness and sharing", we can expand the limited teaching time and space, subvert the traditional teaching concept, and promote the reform of teaching methods, teaching models and teaching management mechanisms in Hongshan College. By combing the content of online open course construction in Hongshan College, this paper analyzes the effect of online open course construction in Hongshan College, and discusses the optimization strategy of online open course in Hongshan College, which provides strong theoretical support and practical reference for the construction and optimization of online open course in Hongshan College.

4. THE PROCESS OF ONLINE OPEN COURSE CONSTRUCTION IN HONGSHAN COLLEGE

On November 7, 2019, according to the Opinions of the Ministry of Education on Strengthening the Application and Management of Online Open Courses in Colleges and Universities (Jiao Gao [2015] No.3) and the Notice of Jiangsu Provincial Department of Education on Doing a Good Job in the Construction of Online Open Courses in Colleges and Universities in the Thirteenth Five-Year Plan (Su Jiao Gao [2016] No.14), on the basis of the recommendation of the school, it was reviewed by experts, the results were publicized and the Provincial Department of Education. Among them, nine courses of Hongshan College of Nanjing University of Finance and Economics, such as Marketing, Management Principles, Warehouse Management, Human Resource Management, Online Payment and Security, Calculus, Cost Accounting, Financial Marketing and Easy Accounting, were approved as "Online Open Courses for Universities in Jiangsu Province in 2018-2019". At this time, the course host leads the course team to plan and carry out various constructions before the course goes online.

4.1 Team Division of Online Open Courses

Before the online course application is approved, a course team has been set up. Take the online open course team of Principles of Management as an example. The moderator is Chen Dan, and the team members are Tan Junlan, Gu Zhen, Shao Feifei and Yu Yujie. The title structure of this young and

middle-aged course team is reasonable, including 1 associate professor, 2 lecturers and 2 teaching assistants. The host will divide the task of course construction into chapters to each team member, and the responsibility will go to people.

4.2 Construction Steps of Online Open Courses

The steps of online open course construction are divided into four steps: structural design, course production, course online and course operation. First, the work of structural design includes: the course host makes clear the course name, course orientation and course depth, so as to make clear the total content of the course; The course host defines the course span (weeks) and the number of hours per week (content load). Take the construction steps of the online open course "Principles of Management" as an example, the teaching content is one chapter per week, and the number of hours per week is 3 hours. The lecturer in each chapter is responsible for designing the weekly teaching content, and then dividing it according to the knowledge points. Each knowledge point after segmentation will be recorded as a teaching video. Second, curriculum production mainly includes video production and non-video content production. Before video production, you need to design the script and PPT of each shooting knowledge point, and send it to the shooting company, choose the shooting mode (the shooting mode of this course is the film and television white shed mode), make an appointment with the shooting company to shoot the video, and the shooting company will make the video. The course team began to design the shooting script and PPT in mid-November, and completed the shooting task of 39 knowledge points from December 5, 2019 to January 10, 2020. Non-video content production includes PPT courseware, class discussion questions, unit tests, final exams, etc. Third, the course is online. The background construction before going online includes: perfecting the online course team, building a complete teaching unit content, publishing grading rules, publishing the course introduction page, etc. A complete teaching unit includes online video explanation, online PPT, quizzes, classroom discussion questions, online unit tests, online unit assignments and so on. The host actively contacted the video production company to negotiate various measures to ensure the progress of video production, and actively implemented them. Finally, the online open course "Principles of Management" was launched in "China University MOOC" on February 22, 2020, and officially started on February 24. It not only completed the goal of online course construction on time, but also helped the online teaching of Hongshan College of Nanjing University of Finance and Economics. Fourth, the course operation. After the online open course is launched, it needs daily operation. Usually, the course host is responsible for dynamically releasing the course preview, teaching units and unit tests every week, organizing weekly online lectures and regular tests, and answering questions interactively in the discussion area. He is also responsible for releasing the final exam, confirming the results, and statistically analyzing the course operation data.

4.3 Teaching Design of Online Open Course

The teaching designs of nine online open courses are similar and have their own characteristics. Taking the teaching design of the online open course Principles of Management as an example, Principles of Management is a core course for business administration majors and an important professional basic course for economic management majors. The main contents of the course include: management activities and management theory, management ethics and corporate social responsibility, decision-making and planning, organization, leadership, control and innovation. Through the study of this course, students can have a comprehensive and in-depth understanding of management activities, management ideas, management theories, management ethics and five functions of management (decision-making and planning, organization, leadership, control and innovation). Through teaching case analysis, students can learn to understand the specific application of management theory, improve their ability to integrate theory with practice, and train and cultivate their ability to analyze and solve problems independently.

4.4 Online Open Course Teaching Mode

The online open course of Hongshan College adopts the online multi-channel and mixed teaching mode of "Online open course on MOOC platform of China University + Mu classroom + QQ group learning + Tencent conference". It mainly includes the following five links: First, release the online teaching arrangement before class. Reasonably plan

the weekly online teaching arrangement, and publish it in the form of QQ group announcement one day before class to inform each student, so that students can make clear the course arrangement and learning tasks of each class, make good preparations and improve learning efficiency and effectiveness. Second, use MOOC online open course of China University. Instruct students to choose online courses of Hongshan College in MOOC of China University, and watch learning videos, learn PPT, participate in class discussions and complete unit tests on this platform. Third, use the classroom. Mu classroom is an attached function of MOOC in China University, and it is a hybrid teaching tool based on online courses and serving classroom teaching. Through the use of Mu Classroom, teachers can check in attendance before each online learning class, conduct practice tests and questionnaires on last week's learning content, and count the data of students' attendance, practice, scores and watching videos in each class. Fourth, use learning QQ group. Establish a learning QQ group, so that all students can join the group with their real names. The main functions of this group are: issuing all kinds of notices, uploading all kinds of learning materials, issuing QQ group homework, correcting homework online, and feeding back results. Fifth, use Tencent conference. After the students finished the MOOC online course of China University, they summarized the important and difficult points and analyzed the cases through the live broadcast of Tencent Conference. One-on-one QQ answering questions about personality; Answer common questions in a unified way through live broadcast. In the live broadcast, we should increase the interaction by asking questions, so as to keep abreast of students' mastery of important and difficult knowledge points, and at the same time, enliven the classroom atmosphere and enhance students' attention and interest in learning.

5. CONSTRUCTION ACHIEVEMENTS AND APPLICATION OF ONLINE OPEN COURSES IN HONGSHAN COLLEGE

After nine online open courses in Hongshan College were approved, they all completed the construction tasks on time and completed the projects on time. After the online open course was launched in MOOC of China University, it met the needs of students' online learning during the epidemic period and achieved the goal of "stopping

classes without stopping studying". Taking the online open course "Principles of Management" as an example, after the online course of "Principles of Management" was first launched in MOOC of China University in February 2020, it not only met the online learning needs of more than 800 students in 16 classes in Hongshan College, but also attracted more than 900 people from inside and outside the school to choose courses to watch and learn. By May 10, 2020, the number of course participants reached 1,714, and the number of class discussion replies reached 15,788. After the course was launched, it was well received by the students in terms of content, form, design and effect. By May 10th, 2020, 42 students had graded and evaluated the course. The course score is out of 5, and the course score is 4.7.

6. OPTIMIZATION STRATEGY OF ONLINE OPEN COURSES IN HONGSHAN COLLEGE

The operation of online open courses has played an important role in successfully completing teaching tasks and achieving teaching objectives. Combined with the construction practice of online open courses in Hongshan College of Nanjing University of Finance and Economics, the optimization strategies of online open courses in Hongshan College are summarized as follows:

6.1 Conducting Necessary Training for Teachers in Advance, So That Teachers Can Master the Skills of Online Course Construction

Before the course goes online, teachers should be familiar with the operation method of online course platform, master the functions and usage methods of each module of the platform, and then build course units, course introduction pages, grading standards, etc. Therefore, the earlier the platform operation training, the better. Many colleges and universities only train teachers in platform operation when courses are urgently needed to go online, which requires teachers to master the methods and operate them in a short time, which brings great pressure and challenges to teachers. In addition, teachers need to learn to use Tencent classroom, Tencent conference and nail all kinds of online teaching software to meet the needs of online teaching.[3]

6.2 Paying Attention to Details and Improving Curriculum Construction in Multiple Dimensions

First, in the construction of online courses, knowledge explanation should be precise and concise, and the time of each video should be 10-15 minutes. Second, the dissemination of course content should be able to attract students, because online learning does not have face-to-face communication between teachers and students in offline classrooms. If there is no attractive content and no external constraints, students will easily give up learning. Third, exercises should be quantitative and intensive, which can consolidate and strengthen in time.[4] Fourthly, paying attention to the interactive communication of group learning can be achieved through classroom discussion or Tencent meeting interaction. Fifth, pay attention to statistical analysis of large-scale learning behavior records. The MOOC course platform of China University has statistical function for learning records. By analyzing these data, students can timely grasp the situation of watching videos, exercises, unit tests and final exams at various stages, and teachers can understand students' learning situation and provide targeted counseling and answering questions. Sixth, online courses should be continuously iterated, revised and updated according to the changes of internal and external environment, and the quality of online courses should be continuously improved with learners as the leading factor. [5]

6.3 Determining the Host of Each Online Course, Setting up a Course Construction Team and Making a Construction Plan

The application of online courses, the construction of course system, the construction before going online and the operation after going online are closely linked. How to plan and organize is a strategic issue in curriculum construction. Therefore, it is necessary to determine teachers who are capable and responsible as course hosts and lead the course group to complete the curriculum construction on schedule. The construction of an online course before and after going online is complicated and tedious, which is difficult to be completed by the host alone, so teamwork is needed. After determining the construction plan from the strategic level, the moderator should guide the members of the course group to complete various specific tactical tasks such as knowledge point segmentation, PPT production, video shooting and item bank construction at the tactical level.

6.4 Colleges and Universities Attach Great Importance to It, Allocate Construction Funds, and the Academic Affairs Office Takes the Lead to Determine the Online Courses to Be Built

The construction of an online course is a complicated project, which needs to pour money, time and energy. The shooting and production of course video is the biggest capital investment, so it needs financial support from the school level. Which courses can be built into online open courses need the Academic Affairs Office to take the lead in the application and review of online courses, and finally determine the online courses that can be built.

7. CONCLUSION

Through the construction of online open courses in Hongshan College, we can draw three inspirations: First, from the students' level, under the general trend of "Internet + education", we should make full use of high-quality learning resources on the Internet, expand our knowledge and improve our ability of autonomous learning. Second, from the perspective of teachers, teachers should be diligent in learning, apply what they have learned now, and constantly innovate teaching thinking and teaching methods. According to the needs of curriculum construction, we should skillfully use online teaching platforms such as Love Course, Superstar and Rain Class, and teaching software such as Tencent Conference, Tencent Classroom and Nailing. In order to ensure the teaching effect, teachers should not only fully prepare various teaching materials and resources and convey them to students, but also pay attention to students' acceptance. Tencent conference can activate the online teaching atmosphere by adopting interactive methods that students like or introducing cases that can arouse students' interest. [6] Third, from the school level, strengthen the guidance and training for the construction of online courses and increase the investment in construction funds. Through the construction of online open courses, the mixed teaching mode of "online + offline" can be realized, and the teaching efficiency and effect can be improved. [7]

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REFERENCES

[1] Wang Jianming. Construction and Practice of Online Open Courses Based on Superstar Pan-elegant Platform [J]. China Education Informatization, 2020(14):78-80.

[2] Wang Xiaoqian. On the construction and improvement strategy of online course of Engineering Survey [J]. Shanxi Youth, 2022(22):82-84.

[3] Li Yongxin, Wang Huanchun, Wang Yingnan. The three-dimensional construction practice of the online course "Pathogenic Biology" integrating morality, technology, course, certificate and post [J]. China medical education technology, 2022(10):591-596.

[4] Wen Yanxia. The value and optimization strategy of online curriculum construction in Hunan Higher Vocational Colleges [J]. Teaching and research reform, 2022(9):90-92.

[5] Wang Chong. Some Thoughts on the Construction of Online Open Courses in Higher Vocational Colleges [J]. Contemporary Educational Practice and Teaching Research, 2019 (22): 28-29.

[6] Yuan Jianwei. Discussion on the Promotion and Application of Online Open Courses [J]. Modern business trade industry, 2019 (27): 174.

[7] Liu Guotao, Ma Hui. Research and practice on the reform of mixed teaching mode based on online courses-taking art design courses as an example [J]. Writers' World, 2020(13):169-170.