

Research on the Online Teaching Methods of College Courses During COVID-19

——Taking School of Teacher Education in Nanjing Normal University as an Example

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Abstract

Under the influence of COVID-19, major universities in China quickly launched online teaching to meet the needs of the school's teaching schedule and students' courses-learning. Taking School of Teacher Education in Nanjing Normal University as an example, this article will research on the online teaching methods of college courses during COVID-19 and then analyze the advantages of online teaching.

Keywords

COVID-19; College courses; Teaching methods.

1. Introduction

Since the outbreak of COVID-19, the Central Committee of the Party has concentrated its leadership and unified deployment to lead people to fight against the epidemic. At present, it has achieved anti-epidemic achievements that have attracted worldwide attention. The advent of the epidemic poses new challenges to the traditional education and teaching methods. In order to ensure the teaching progress and teaching quality of domestic universities, the Ministry of Education has clearly emphasized that teachers teach and students learn online. In order to avoid the accumulation of personnel and consolidate the results of the anti-epidemic that have been achieved, online teaching has become the preferred way for teachers and students. In response to the Ministry of Education's call to meet students' learning needs, universities across the country actively set up online courses. Taking Nanjing Normal University as an example, around 330 teachers conducted online teaching on the open day of online classes on February 17, and the number of students who learning online reached more than 15,000. Over 340 online courses "meet" with students in the cloud. Teachers use various teaching methods such as SPOC, "Rain Classroom", and "Tencent Meeting", combing QQ groups, WeChat groups, and Ding Talk, to learn together with students online.

School of Teacher Education, Nanjing Normal University, realized in 2018 that the era of "Internet + teacher education" has come, and the use of information technology to promote teacher education curriculum reform has become a new opportunity and challenge. "Elementary Education Online Classroom of NNU" led by the Research Center of Elementary Education was officially launched in the spring of 2019. This SPOC learning platform with distinctive characteristics of teacher education, provides a stable course platform guarantee for online teaching in the school. All designed around the theme of "teacher education", there are 5 kinds of courses for undergraduates, masters and teachers' qualification & development, with liberal arts classes included. Compared with the traditional way, courses can be more personalized in content, taking into account the needs of learners with different learning levels and identities. The workload of the teacher's preparations before class may be a little larger than that of traditional teaching, but the teacher's careful presets can bring students more exciting generation than before on this platform. It also in the meantime tests their self-control ability so as to improve theirs learning in the true sense What is apparent is that it is both necessary and significant to conduct online teaching of college courses during COVID-19.

2. Research on the Online Teaching Methods of College Courses during COVID-19

Online teaching of college courses is not only 40 minutes in class, but also an organic whole that includes teaching before, during and after class. Therefore, according to the teaching process (before, during, and after class), the author explores the online teaching methods of college courses according to the different characteristics of teaching carriers.

2.1 Relying on micro-lectures to carry out new knowledge learning before class.

Micro-lectures can be defined as a short and complete teaching activity around a certain knowledge point or teaching link carried out by teachers, which is often recorded by its main carrier——videos. Under the traditional teaching, students rarely cultivate the habit of previewing. Based on the view that “the class is the main place for learning”, the teacher also puts the teaching of knowledge completely in the classroom, making the class full of teaching new contents, and leaving little time for students to digest and summarize knowledge, not to mention ask innovative questions and think over them. Over time, students’ enthusiasm for learning is fading away, critical thinking cannot be cultivated, and teachers will be exhausted by total single lecture of the entire class. Therefore, we advocate that teachers record micro-lectures in advance, and upload relevant videos and learning materials to the QQ group before the formal class for students to download and learn freely. It is advised that teachers also arrange some inquiry questions that need to be completed by students individually or in groups, so that students can strengthen their understanding of new knowledge and the ability of independent or cooperative inquiry accordingly.

Of course, as a concept originated from the western developed countries, the range of real use of micro-lectures in China is quite small. Though conducive to student learning, the method requires extremely high consciousness of student learning. Therefore, for universities that have almost never adopted micro-teaching, they need to find a compromise. For example, in the formal online class, teachers use about 10 minutes to conduct a summary review of the content of the micro-lectures in the form of Q&A, constantly strengthening the students’ attention to the new knowledge learning before class.

2.2 Using the Tencent Meeting to conduct “flipped classroom” teaching in class.

Tencent Meeting is an audio and video conferencing product owned by Tencent Cloud. It can hold up to 300 people for online meetings, whose functions of real-time shared screen and online document collaboration are also well received. In the practice of universities’ online teaching, we can use the intelligent platform of Tencent Meeting to conduct “flipped classroom” teaching. Flipping the classroom, relative to the traditional classroom, means that students learn knowledge by watching micro-lecture videos and other materials before class, and digest knowledge through group discussion and teacher guidance in the classroom. Moving the learning of knowledge before class, the main process in the class is the presentation of the teacher’s questions put up in videos and the students’ inquiry tasks about them. Especially when it comes to the presentation of group research activities, students can use the “shared screen” function in the Tencent Meeting to present the group’s thinking about the topics arranged by the teacher, and rely on documents, slides, videos, H5 and other rich forms. In this way, the classroom stage is truly handed over to the students, the students become the protagonists of the classroom, and the teachers retreat to the stage and give real-time evaluation of the students’ highlights and deficiencies in the display process with their own professional knowledge, which really enhances the students’ learning effect.

At the same time, the Tencent Meeting is not limited to the number of people who can watch the live broadcast function that can be watched on all terminals, which forms an open and shared classroom. It also helps students who are not in this administrative class but are interested in the course can also watch the live broadcast of the demonstration course synchronously, greatly enriching students’ learning choices. At the same time, it facilitates the inter-school and inter-regional school classroom

remote communication and information sharing, and then actually improves the teaching quality and standards of universities under the vision of shared education.

2.3 Building a MOOC platform for dynamic monitoring after class.

For online teaching of college courses, in addition to the micro-classes before class and the flipped classroom in class, the consolidation of knowledge after the class is also indispensable. It is high time we were committed to developing and making well use of the network platform similar to “Chinese University MOOC” to promote the formation of a new model of online teaching of college courses. Taking the “Situation and Policy” opened by School of Marxism Studies, Nanjing Normal University as an example, the participation on the platform has exceeded 230 thousand, and there are 8 universities offering similar courses. It can be seen that the open and shared learning form of MOOC is deeply loved by learners.

The MOOC platform is well-known in the world for its wide audience and friendly use. It is an important way to reconstruct the teaching methods of college courses. Teachers can synchronously upload the micro-lectures that need to be uploaded before the class to the MOOC platform, together with relevant slides and research tasks, so that students can learn by themselves. The platform’s after-class testing function is more powerful, which allows to set up on-site testing and unit tests, adopt the way that “objective questions are corrected by computer, and subjective questions are corrected by the teacher”, dynamically generate student learning feedback according to the test, which makes it convenient for the teacher to follow up the students’ learning then improves the teaching model. It also helps students understand their learning effects and adjust the time allocation. The MOOC platform’s dynamically generated feature will continue to improve the course teaching and update the teaching and learning methods from the students’ reality, and truly promote students’ more efficient learning.

Although the MOOC platform has a huge user group and a good function of uploading and sharing network resources, it also puts forward certain requirements for the school’s platform construction and maintenance capabilities. So far, few universities have been able to open high-quality courses on the “Chinese Universities’ MOOC”, and the innovation in the form and content of courses needs to be improved. The online courses available also have problems with old-fashioned forms and lengthy contents. The advantages of online courses and timely tests after class are not fully utilized. Therefore, in order to truly use the MOOC platform to consolidate the innovative achievements of college courses, it still requires joint efforts of multiple parties.

3. Analysis of the Advantages of Online Teaching of College Courses

As mentioned above, during COVID-19, universities conducted online teaching in a variety of ways, with wide content coverage and many advantages. The author summarizes their advantages in the following three aspects:

3.1 Innovative.

Carrying out online teaching is not only a special move during COVID-19, but also helpful for colleges and universities to reexamine the shortcomings and shortcomings of the traditional teaching methods in practice, and to think about ways to innovate them. For a long time, limited by the teaching venue and related equipment, the teaching way of most domestic universities still stays in the traditional large-class teaching, and the class is still a one-way interaction of “teacher speaking, student taking notes”. On the one hand, students just mechanically record the content of the teacher’s slides or words written on the blackboard without too much thinking, and nearly have a sense of classroom participation with the teacher; on the other hand, most teachers just complete the teaching tasks and fail to do structural design to teaching contents, with sides copied from textbooks. They often lack enthusiasm, too. Online teaching, especially the uploading of micro-lecture video materials, has greatly changed the previous concepts of course teaching and promoted the advancement of learning. Teachers are fully prepared before class, and there are more exciting presets. Students can use the inquiry questions provided by teachers to jointly improve their ability in communication.

3.2 Interactivity.

As mentioned above, the interaction between teachers and students in traditional offline large-class teaching is only one-way, and the form is relatively old—the teacher asks questions and the students respond passively. Teachers are the main promoters of classroom activities, while students only passively accept knowledge. Online teaching can really promote the two-way interaction between teachers and students, thereby effectively improving the effectiveness of college curriculum teaching. Relying on a real-time interactive network platform (such as the Tencent Meeting), teachers and students can have direct voice interaction, and students can ask teachers questions. At the same time, under the guidance of the "flipped classroom" teaching theory, the classroom becomes the stage for students to display, and the teacher can inspect students' knowledge mastery and comprehensive ability from various aspects according to the students' classroom performance. Conditions for multiple evaluation of students through interactive and effective teacher-student discussions are created by this.

3.3 Diversity.

The evaluation of university courses includes many aspects, which can be divided into three categories: evaluation of students, evaluation of teachers and evaluation of the course itself. The new round of curriculum reform emphasizes the diversification of evaluation subjects and the process of evaluation, requiring teachers and students to carry out relevant evaluation in the process of teaching and learning. Students start to evaluate teachers from the aspects of teacher's lesson preparation and teaching, as well as the arrangement of homework. They can also evaluate students in the same group and class in classroom interaction and group speech. Teachers will rely on students' classroom performance and group interactions. They are allowed to do mutual evaluation of teachers who teach the same course... These multiple evaluations, which are limited by time and space in traditional offline teaching, can be easily achieved through online teaching. Teachers can use the online evaluation function of the online teaching platform to publish evaluation questionnaires and forms online. Students and teachers fill out the report in time, and a report is automatically generated in the background and then be given feedback to both teachers and students. In this way, use online teaching to update the evaluation concept of teachers and students, and rely on real-time evaluation feedback to urge teachers and students to constantly improve their own ability and literacy, which promote their development through evaluation.

4. Conclusion

Although the arrival of COVID-19 has had a certain impact on all areas of our country, we have also seen more and more universities begin to respond to the government's call and rely on the highly developed Internet to carry out online teaching. Although the online teaching of college courses in our country is still in the stage of exploration and exploration, some novel methods have been formed. With the continuous innovation of the country's Internet technology, the online teaching methods of college courses will continue to be optimized, gradually conforming to modern requirements and the psychology of teachers and students. At a time when the effectiveness of anti-epidemic in China is becoming increasingly apparent, The author hopes that more teachers can devote themselves to the design of online teaching courses, actively learn the relevant techniques of online teaching, and form a high degree of information literacy, so that even when returning to offline classroom soon, they can still combine the beneficial experience and practices of online teaching, and use the relevant technologies of the Internet to complete teaching tasks with high quality.

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