

China's higher education reform under the epidemic crisis

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ABSTRACT

Since the outbreak of COVID-19, our lives have been greatly affected. Thus, the Ministry of Education proposes to adopt the advantages of the Internet and use online platforms to carry out online teaching and achieve "stop class and never stop learning". At this time, online education naturally became the focus of attention of the whole society. Internet teaching breaks the original time and space constraints, allowing students to learn through video at home. Just like a coin has sides, on the one hand, it reduces the harm caused by the gathering of people. On the other hand, the problems in it also show up. For example, people's misunderstandings of "Internet + education", problems such as the lack of theoretical guidance for online teaching innovation, the continuous optimization of condition guarantees, and the continuous improvement of policy mechanisms need to be resolved. This shows that it is particularly important to put forward key measures to promote the innovation of online teaching methods. Online teaching urgently needs to strengthen the top-level design and establish a sound education governance system on the basis of respecting the rules of online education to realize the modernization of teaching capabilities. At the same time, the advantages of information technology must be used to build a stable educational network space. In addition, it is necessary to give play to the guiding role of public opinion, and to establish a mechanism that is conducive to education decision-making and risk assessment by changing teaching thinking. Finally, measures to improve teachers' professional literacy are also required. Only by accomplishing the above-mentioned measures can we provide useful reference, and then promote the sustainable and healthy development of online education and teaching in my country in the new era, and run education that is beneficial to the people.

Keywords: *Online education, education reform, epidemic crisis, higher education.*

1. INTRODUCTION

To fight the epidemic, the start time of students continues to be postponed everywhere. Some schools in China are now embracing online learning as a method of teaching, as so many students have had to remain at home to minimize human to human interaction to respond to the urgent work deployment of the Ministry of Education, thus achieving "stop class and never stop learning". This has largely eased the anxiety caused by parents because their children cannot start school normally. However, if schools do not think deeply about the practical proposition of "how online teaching should be carried out", and just passively implement the administrative instruction, it is obviously far from enough, and the desired teaching effect cannot be achieved.

2. The development of on-campus education in Chinese universities

2.1. The development of online education in China

When it comes to online education, it is also known as distance education or network education. It refers to an educational form through Internet technology, which uses digital media to connect teachers and students for learning and teaching. The advantage of this teaching form is that it can make full use of all kinds of conditions provided by innovation, and it is a subversion of the traditional classroom to break the time and space limitation of traditional teaching.

With the development of Internet technology, online education has been welcomed by people all over the world since the 21st century, and it has spread rapidly from developed European and American countries to Asia. This also aroused the interest of some entrepreneurs in China, who began to study and develop online education.[1] Early online education focused on distance education in colleges

and universities, where the development of Internet technology was relatively high, and the teaching mode developed from simple text form to multimedia form. However, due to production cost, bandwidth cost, number of Internet users and other reasons, it did not really develop. The online education really entered the stage of rapid development from 2010. Since then, the forms of online education have been diversified, and the market scale, number of enterprises and user scale have grown rapidly. Not only have a large number of innovative and entrepreneurial enterprises emerged, but also major Internet companies have entered the field of online education in different forms. With the rapid development of network information technology, especially the rapid development of traditional PC-based Internet to mobile Internet, it has created a way of learning, working and living across time and space, which makes the cost of knowledge acquisition cheaper and more convenient. This leads to the new way of teaching and learning, which is no longer limited by time and space as the traditional face-to-face education.

2.2. *The main mode of online education in colleges and universities*

Different from other countries, the way of online education in China is mainly based on the construction of excellent courses and massive open online course. In 2007, about 1,800 national-level excellent courses were published in China, forming a "national-provincial-school" three-level excellent course system. Since 2012, the Ministry of Education has upgraded the original national excellent courses to excellent resource sharing courses, focusing on college teachers and students and social learners, aiming at improving teaching and learning effects. In addition, it also commissioned Higher Education Press to launch a curriculum resource sharing platform—"Love Curriculum", which is responsible for the construction, application and management of national excellent open courses.

After several years of development, online education has ushered in a period of vigorous development. Some universities offer massive open online course to learners all over the world, mainly Peking University and Tsinghua University. In 2013, Peking University led more than 60 universities in China to set up the curriculum sharing alliance between eastern and western universities. In addition, they also launched the wisdom tree platform. The most important thing is that Peking University has set up a massive open online course service platform, mainly Chinese-Chinese massive open online course, which serves the global Chinese higher education through the support of advanced technology. This is the further promotion of massive open online course by Peking University following the courses offered on Coursera and EDX platforms. At the same time, domestic colleges and universities began to use massive open online course resources to try mixed teaching modes, such as SPOC and flipping classrooms, and based on the analysis of learning

data, improved the teaching design of courses. In June 2016, Guiding Opinions on Deepening Education and Teaching Reform in Colleges and Universities Affiliated to Central Departments clearly required subordinate colleges and universities to actively promote the construction of online open courses and provide them with special funds and policy guarantees. In September 2016, the Ministry of Education promulgated the Opinions on Promoting the Recognition and Conversion of Higher Education Credits, which proposed that online open courses should be included in the credit assessment of students.

3. Influence of college education in epidemic crisis

The first point is the limitations of education goals under the epidemic. Under the crisis of the epidemic, many education administrators and teachers mainly focus on the progress of teaching, the main points of examinations, and academic achievements. They lack educational imagination, ignore the comprehensiveness of talent development and the diversity of educational goals, and fail to turn the problems caused by the epidemic crisis into teaching elements and cultivating nutrients. Although subject courses are the most important learning content for students during the epidemic, epidemic education leaves students not only "online lessons" and "knowledge points", but should also include large courses that integrate life. [2]

education, education action subject still exposes the problem of ability loss. The most important problem is exactly the “sense of alienation” of teachers to the information technology. Some old teachers have little contact with modern education technology, and lack specific practice of online teaching. [4]They also have certain resistance to the concept of online education. On the other hand, the abilities of teachers on designing courses based on the network platform also exposes certain deficiencies. Due to the lack of necessary sense of contingency and creativity, teachers generally lack effective responses to the practical problems such as how to carry out differentiated network teaching design according to the characteristics of different subjects, how to develop and design modular courses that are more suitable for online teaching, how to make better use of the network to stimulate the learning interests of students, and how to use the network more effectively to communicate and interact across the time and space.

4. Methods of carrying out online education in epidemic crisis

4.1. Strengthen top design, establish and improve education governance system

Top-level design refers to overallly considering the various levels and elements of the system, tracing the roots, taking the overall situation, and seeking a systematic solution to the problem at the highest level. In college education under the epidemic crisis, China should also start from the top level, make overall plans, and establish a sound education governance system. The education governance system is an important part of the national governance system. [5] After the state initiated Level I response to public health emergencies, the Ministry of Education and education administrative departments at all levels actively responded to the unified decision-making and deployment issued by the State Council, initiated emergency plans for the education system, and guided local governments to implement territorial responsibilities. Schools at all levels and various types have carried out the epidemic prevention and control work steadily, and quickly implemented measures such as postponing the start of school and “stopping classroom but neither teaching nor learning”. With the implementation of online courses in some areas and schools, the public has also questioned various aspects such as increasing the burden on students and teachers, the crowded state of live broadcast platforms, and education fairness. [6] The Ministry of Education issued a notice in a timely manner, which timely clarified the connotation of “stopping classroom but neither teaching nor learning”, and urgently stopped all kinds of behaviors of online course learning ahead of time. In the critical period of epidemic prevention and control, education governance must obey the overall needs of the country, follow the laws of education, address practical problems, respect the

characteristics of the physical and mental development of the students, and pay attention to the allocation of educational resources and differences of teacher levels.

4.2. Respect online education rules and realize the modernization of the teaching ability

Under the epidemic crisis, education must respect the rules of online education and give full play to the advantages of online teaching. Online teaching does not mean moving regular classroom teaching to the Internet, so it cannot copy and apply regular classroom teaching arrangements and teaching methods. If online teaching still adopts the instillation teaching method of “teacher explaining and students listening”, it will not only increase the workload of teachers, but also cause a huge waste of teaching resources. The unique advantage of online teaching lies in the openness and sharing of resources. From the perspective of the openness of courses, open education platforms such as the MOOC national quality course teaching platform of Chinese universities and open courses of foreign universities have gathered a large number of high-quality online learning course resources. Teachers can screen and integrate these resources, recommend high-quality resources to students, and guide students through online teaching to scientifically select learning resources to complete the learning of relevant teaching content. From the perspective of curriculum sharing, the teaching management department of the school should encourage teachers of the same subject and teaching schedule to share teaching resources through the form of network joint lesson preparation, so that they can realize teaching cooperation. Such a measure not only saves the teacher's time, but also integrates teaching content. In this way, a group of disciplines can be built and the links between disciplines can be strengthened. From another point of view, this approach also reforms the teaching model, both in terms of teaching content and teaching methods. [7]Teaching through subject clusters makes it easier for students to connect professional knowledge and integrate the learned knowledge into specific practice.

4.3. Give full play to the information technology strengths and construct a stable education network space.

Since the 21st century, information technologies such as the Internet, artificial intelligence, and big data have developed rapidly. In addition, the speed of integration with education and teaching has also accelerated, which is conducive to realizing the sharing of high-quality educational resources, providing personalized and precise teaching guidance, and achieving continuous improvement of teaching quality. In the critical period of current epidemic prevention and control, online teaching can break through the time and space limitations of individual learning, and meet the needs of students for home learning.

[8] At the same time, online teaching is conducive to accelerating the process of education informatization and promoting the improvement of information literacy of the teachers. Of course, the full implementation of online teaching may also bring about problems related to education equity due to the regional or urban-rural differences in the allocation of educational technology resources. For example, a few remote areas and villages still have no network coverage. During the epidemic, we often see students looking for news about places with signals for online classes. Therefore, we should take the prevention and control of major epidemics as an opportunity to improve the quality of online teaching, promote the balanced allocation of urban and rural education resources, and build a stable online space that serves the learning of all people.

4.4. Change teachers' teaching ideas to improve teachers' professional quality

Our exploration and reflection on online teaching should not only realize that information technology promotes teaching reform, but also pay attention to students' "learning and real learning state". As we all know, learning motivation plays a key role in learning. In order to stimulate students' learning motivation, teachers are required to turn the teaching materials into interesting, useful and meaningful teaching contents, so as to improve the "adhesion" to students' learning. When it comes to the difference between online teaching and offline teaching, what is shown is that the carrier of knowledge is different. Take student learning as an example. Whether online or offline, students need to go through three basic links: reading, thinking and expressing. Compared with the traditional classroom, micro-class in massive open online course has a series of disadvantages, such as students can't have in-depth discussion face to face, teachers can't give feedback in time, can't ask targeted questions according to students' learning status, and lack of eye contact between teachers and students. [9] However, these disadvantages can't be solved by building several online communication platforms or providing several online interactive discussion areas. Especially in the current severe epidemic situation, college students are impetuous, confused and uneasy, and only move the course from offline to online. After teachers lack eye contact, on-site questioning, space movement and timely feedback, it is difficult to successfully attract students' attention, and naturally, students cannot be guaranteed to firmly grasp knowledge. Therefore, what teachers should do is to enhance the attractiveness of online courses. Only when teachers try their best to improve the teaching level and skills can they attract students' attention, make students love to listen and want to listen, and most importantly, they can have a feeling that they understand it all at once after listening. Only when teachers achieve this effect can they effectively attract students' interest in learning and stimulate their motivation to learn, so that students can "learn well" while

"not stopping learning", thus ensuring the quality of online teaching.

5. CONCLUSION

Due to the raging new coronavirus pneumonia epidemic, the opening of schools at all levels and types of schools across the country has been forced to postpone. To this end, the Ministry of Education has made emergency work arrangements, requiring all levels and types of educational institutions to "stop having classes but not studying" through online teaching. This action has undoubtedly given the public a "booster", which to a large extent alleviated the anxiety of the public caused by the class suspension. However, if schools of all levels and types only passively implement the administrative instructions of the Ministry of Education and do not think deeply about the practical proposition of "how to carry out online teaching", this is obviously far from enough. Colleges and universities need to balance the situation of online teaching and face-to-face teaching, strengthen research and practical exploration, promote the reform of internet + teaching mode, learning mode and service mode, and promote school transformation and classroom revolution to meet the challenges and opportunities faced by higher education in the future, and finally improve the education level of our country.

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