

The Online Education Risk Response and Solutions under the Background of “COVID-19” Epidemic Situation in China

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ABSTRACT. The "COVID-19" epidemic has brought a severe test to China's governance system and ability. "No classes, no schools, no teaching" has become a passive response to the epidemic in China's education field. Online education has been forced to take the stage of history and play a vital role. This paper systematically sorted out the development of online education during the outbreak of "COVID-19" through literature data method, network investigation method and logic analysis method. The study found that online education has high requirements on the network environment and hardware equipment, and education equity is difficult to be effectively guaranteed; the complicated curriculum resources and uneven platforms, schools and teachers often get into trouble; online education requires more teachers' information technology level and adaptability. High, teachers urgently need to fill in the short board; Online learning requires the integration of school education and family education, the existence of risks such as the appearance of dissociation, and the corresponding methods and solutions.

KEYWORDS: COVID-19, Online Education, Educational Equity, Coping Styles, Strategies

1. Introduction

At the beginning of 2020, the sudden "COVID-19" epidemic swept through China and spread all over the world. From the outbreak to the present, this epidemic has experienced a long period of time, a wide range of influence, and a high number of diagnoses. It is also unique in the historical development process. Fighting against the "COVID-19" epidemic is a major test of the country's governance system and governance capabilities, and it has also become a touchstone for testing China's overall education governance modernization level. At present, the overall trend of China's national defense and control of the "COVID-19" epidemic is positive. The education field is also actively responding to the national call to deploy the epidemic prevention and control work. The Ministry of Education has launched a series of

measures such as delayed school start and “no suspension of classes, no suspension of classes”. In order to avoid the losses caused by the delayed start of schools, schools have started online education through network platforms, which has also brought unprecedented opportunities and challenges to the development of online education. Network teaching has broken through the time and space limitations of individual learning, which can meet the learning needs of students at home, and at the same time is conducive to accelerating the process of education informatization and promoting the improvement of teachers' information literacy. Online education is a new education method that uses modern information technology such as the Internet, artificial intelligence, and big data to interact with teaching and learning. It is an important part of service education in the new era [1]. Online education is a new form of education with the network as the medium. It has innovated the educational organization model, teaching model, and service model, and built a new education ecosystem in the digital age [2].

According to statistics from the Mycos Survey, with the rapid increase in the number of smartphones used in China, the scale of Chinese online education market and the number of users are exploding. According to incomplete statistics, the scale of Chinese online education market has already accounted for 36.8% of the total expenditure on family education. If the "COVID-19" epidemic cannot be effectively controlled in 2020, it is speculated that the scale of Chinese online education market will reach unprecedented growth in 2020, and it may even change traditional education methods; there is no doubt that in user growth, 2020 Chinese online education will reach a record high in history in 2014. But what needs to be highly valued is that the "COVID-19" epidemic has brought opportunities to Chinese online education as well as serious risk challenges. If it is not resolved in a timely and effective manner, it will inevitably affect the healthy and stable development of Chinese education informatization and the smooth realization of the grand goal of education modernization.

2. The risks of the "COVID-19" outbreak online education in China

2.1 Online education has high requirements on the network environment and hardware equipment, and education equity is difficult to be effectively guaranteed

Online education includes online education learners, online education teachers, online education environment, online education resources, online education platforms, etc. The learner is the center, the teacher is the key, the curriculum resources are the core, and the platform and the environment are the foundation. The five-in-one form the online education system [3]. According to the Internet survey, after the outbreak of the "COVID-19", the high standards and strict requirements of the network environment and hardware equipment are difficult to guarantee for many schools. Network teaching has higher requirements for information equipment and network environment. Due to the limited education funds of various schools in

recent years, many school facilities and equipment cannot support or apply the network platform, and the network's upstream and downstream speeds cannot meet the information teaching needs under live broadcast. Moreover, due to the difference in economic foundation level in our country, it has been fully reflected in education. In particular, the network environment and hardware equipment of some schools in rural areas in poor areas are completely unable to meet the actual needs of online teaching. This is enough to show that the "COVID-19" epidemic has fully exposed the shortcomings of education information network environment in China, which has exacerbated the imbalance of education.

2.2 The complex curriculum resources and uneven platform, schools and teachers often get into trouble

The effective development of online education depends on abundant online learning resources. High-quality online learning resources are the guarantee for improving the quality of online education. The Internet provides rich and diverse learning resources for online education, such as video, audio, text, images, e-books, etc., its presentation is more intuitive, visual and vivid, and can have a direct impact on the effect of online learning. The online learning platform is a software system that supports online learning, so the ease of use, stability, and cognitive usefulness of the online learning platform will affect the effectiveness of online learning to a certain extent. Internet investigations revealed that after the outbreak of the "COVID-19" epidemic, many schools faced a difficult situation in online education. On the one hand, schools and teachers face a large number of online education resources and dazzling online platforms, and often fall into selective conflicts; on the other hand, there are few online education resources and platforms for solving specific problems that are suitable for the actual situation of the school. Although there are currently a number of high-quality online education resources such as national quality course projects and national quality online open curriculum construction, other online education resources still have problems of unevenness and mixed eyes; although many learning platforms are relatively complete in function modules, they are online. The ease of use, convenience, and interactive support of the learning platform vary, making it difficult to meet the personalized needs of online learners. Therefore, although there are many online education resources and platforms, schools and teachers in many places are still in an embarrassing situation. How to ensure that the online education resources are "usable and well used" and the online platform is "easy to use and effective" is one of the important problems to be solved urgently in China's online education in the future.

2.3 Online education has high requirements on teachers' information technology level and resilience, and teachers urgently need to fill in the shortcomings

With the widespread application of artificial intelligence, mobile internet technology, and big data, network knowledge and information technology have

grown geometrically, and the amount of teaching information has increased dramatically. The original knowledge ability of teachers can no longer meet their own survival and development needs. Online education requirements teachers must have a high degree of information literacy, a strong ability to integrate and a highly reflective practical ability. However, the Internet survey found that many school teachers make less use of the resources on the network platform. The operation and application of using office software to make teaching courseware, recording teaching micro-videos, and preparing teaching documents are not flexible. Teaching methods lack innovation and teaching modes. Lack of flexibility and lack of new ideas in teaching. In the past, teachers' information technology ability training focused too much on how teachers can promote the integration of information technology and teaching, but they did not pay enough attention to how to improve the ability of processing educational information resources. In addition, some teachers are seriously inadequate in their ability to respond, and they appear at a loss when they encounter technical problems such as technical failures in online teaching, which seriously affects the normal development of online teaching. In addition, the separation of teachers and students in time and space is the essential difference between online education and other forms of education, which brings great challenges to the remote monitoring ability of online education teachers. How to ensure that online education is the same as other forms of education the teaching effect is also an important issue that we must face.

2.4 Online learning requires the integration of school education and family education, and the phenomenon of appearance and separation is common

This epidemic will inevitably bring about major changes in educational concepts. A reform of teaching methods, teaching ideas and even educational philosophy is taking place. Although online education and home learning cannot replace traditional classroom education, traditional classroom education will undergo many positive changes after undergoing this initiative to embrace online education. However, the information literacy of parents and the ability to coordinate and communicate with school teachers have become a real problem in home online learning. The effective integration of school education and home education in the digital age has become a major risk challenge that online education has to face. During the epidemic, some students' information literacy is completely unable to meet the needs of assisting children's online learning at home, and they are busy and even help every time the class is in class; the guardians left in Wuhan are old and do not even operate the most basic computers and smartphones. In addition, because current students have grown up with the rapid development of information technology, they are completely living in the information age and are used to living in a digital environment. However, home online learning has brought anxiety and uneasiness to parents of primary and middle school students. Inattentiveness of children, excessive online learning time affects eyesight, etc., are the main sources of anxiety and anxiety caused by parents of primary and middle school students. Moreover, the parents of the students do not have a deep understanding of the

Internet, and most of them do not even know how to properly guide their children online. In this case, rejection and rejection are instinctive reactions of the students' parents. Due to the large-scale popularization of smart phones, primary and middle school students with weak self-control ability used the mobile phone Internet function during online learning, and were quickly attracted to mobile games, QQ, and WeChat, which also caused parents to have great concerns about students' online learning.

3. The "COVID-19" epidemic brings solutions to online education in China

3.1 Increase investment in online education network environment and hardware equipment to provide a personalized and comprehensive education environment

To fully understand the revolutionary changes brought about by the epidemic to education, we must have the mental preparation to fight the epidemic and fill the shortcomings of rural education informatization as soon as possible. Focus on supporting the improvement of the online network environment and hardware equipment of urban weak schools and rural small-scale schools, eliminate the loopholes in the construction of educational information infrastructure and network environment exposed during the epidemic, and narrow the digital divide between different schools and groups in urban and rural areas, Demonstrate the concept of educational equity. Secondly, effective support services are an important guarantee for the smooth development of online education. Learning support services run through the entire process of online education, such as technical support, continuous updating of learning resources, arrangement of learning activities, supervision of learning processes and learning issues Solution, etc., so that students can enjoy more convenient services during the online learning process, in order to improve students' learning efficiency. In terms of technical support, the school should set up a special online learning service center, equipped with specialized technical personnel, provide perfect technical support, and promptly solve the technical failures of teachers and students in the online education process.

3.2 Tap high-quality online education resources and develop an education management platform based on the actual situation of the school

First, teachers should create a situation suitable for students' online learning, such as creating learning groups or encouraging forum postings to increase communication and interaction between students, reduce the loneliness of students' online learning, and enable them to have a better online learning experience, thereby ensuring Online learning goes smoothly. Secondly, schools should provide high-quality online education resources. When developing online education resources, they must fully consider the characteristics of students' age, personality, learning habits, and cognitive abilities, and formulate different development plans for different student groups. Do a good job in the integration, sorting and selection

of online education resources, carefully select and recommend high-quality resources suitable for students, and effectively reduce the burden of collecting and integrating resources in schools. It is not recommended to recommend resources that are not systematic and have no legal provenance, and avoid Internet Trek. To combine the characteristics and interests of students, schools and teachers should provide students with complete and diverse online education resources, let students choose according to their learning preferences and learning interests, and increase their enthusiasm for online learning. In the use of online educational resources, it is necessary to combine the characteristics of students and the characteristics of disciplines and properly process and process the resources in order to achieve better results. Finally, we must strengthen the overall planning of the platform, build and deploy a course management platform and a teaching management platform to achieve interconnection at all levels.

3.3 Improve the information literacy of teachers and students to ensure the effective development of online teaching and home learning

Teachers should fully recognize the secondary disasters after the epidemic, which will have a profound impact on the follow-up school education. Actively change the concept of teacher education, recognizing that he has transformed from knowledge authority to a knowledge reallocator with shared awareness and a pusher of high-quality educational resources, from knowledge infusion to a personalized learning consultant and a facilitator of teaching interaction. Similarly, learners are not only acquirers of knowledge, but also providers and producers of knowledge, experience, and methods [4]. It can be seen that the digital era puts forward higher requirements for teacher and student information literacy. A new round of action plan for comprehensive improvement of teacher and student information literacy should be implemented, with teachers' online guidance, teacher-student interaction, homework review, academic analysis, question answering counseling and other information technology application capabilities as the training focus, so that teachers can use intelligent retrieval of educational resources tools, visual display tools for teaching across time and space, and teaching evaluation tools in an information environment[5]. In addition, targeted training of courses and teaching methods featuring in-depth integration of information technology will train teachers' ability to use new technologies to carry out personalized teaching, enhance teachers' ability to innovate education and teaching in an information environment, and enhance applications. The ability of data to carry out teaching and evaluation improves the ability of teachers to guide students to carry out online learning. Online interaction, online self-learning and online cooperation should be taken as the core of students' information literacy improvement, and students in the information age should be trained to think systematically, humane precipitation and humanistic feelings and aesthetic appeal, complex and changeable cognitive ability, general skills and creativity.

3.4 Establish and improve the supervision system and mechanism to ensure the

healthy operation of online education

To ensure the healthy operation of online education, it is necessary to strengthen the top-level design of online education laws and regulations, establish and improve a professional certification evaluation system, and provide help and guidance; moderately improve the online education entry standard; establish an online education prepayment management system and risk reserve system to ensure the vital interests of learners. Secondly, adhere to the principles of coordinated cooperation and comprehensive governance, each responsible for its own duties and responsibilities. It is necessary to standardize online education behaviors, and severely investigate and deal with violations of laws and regulations, such as exceeding the standard and leading, test-oriented, false propaganda, and creating anxiety. Establish a negative list system for online education institutions and their employees, and seriously handle online education institutions and employees included in the negative list in accordance with law and regulations. Strengthen the industry self-discipline of online education institutions and their employees, formulate industry management standards, clarify responsibilities and authorities, urge strengthening self-management, and carry out industry standards and self-discipline

4. Conclusion

During the epidemic prevention and control period, offline teaching cannot be carried out properly, and online teaching has become a key platform for schools to implement "no classes, no teaching, and no school suspension". We must always remind ourselves that although online teaching has technical advantages that conventional classrooms do not have, the vitality of classroom teaching lies in the enlightenment and cultivation of students in the interaction between teachers and students, students' awareness and awakening of the meaning of life, culture Interaction with people and construction of cultural knowledge. Even after the epidemic is over, online teaching can still be widely used by teachers as a useful supplement to regular teaching, but we must realize that teacher-student interaction in regular teaching can never be replaced by online teaching technology.

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